

NBSIR 73-214

LEAA Police Equipment Survey of 1972 Volume V: Handguns and Handgun Ammunition

S. Bergsman, E. Bunten, P. Klaus

Technical Analysis Division
Institute for Applied Technology
National Bureau of Standards
Washington, D. C. 20234

Final, July 1971 – August 1973

Prepared for

National Institute of Law Enforcement and Criminal Justice (NILECJ)
Law Enforcement Assistance Administration (LEAA)
Department of Justice
Washington, D. C. 20530

REPORTS FROM THE LEAA POLICE EQUIPMENT SURVEY:

The present report is one in a series of reports produced from data gathered by the LEAA Police Equipment Survey of 1972. Listed below are the seven reports of that survey.

National Bureau of Standards Report 73-214. (The present report). LEAA POLICE EQUIPMENT SURVEY OF 1972, VOLUME V: Handguns and Handgun Ammunition.

National Bureau of Standards Report 73-210. LEAA POLICE EQUIPMENT SURVEY OF 1972, Volume I: The Need for Standards -- Priorities for Police Equipment.

National Bureau of Standards Report 73-211. LEAA POLICE EQUIPMENT SURVEY OF 1972, Volume II: Communications Equipment and Supplies.

National Bureau of Standards Report 73-212. LEAA POLICE EQUIPMENT SURVEY OF 1972, Volume III: Sirens and Emergency Warning Lights.

National Bureau of Standards Report 73-213. LEAA POLICE EQUIPMENT SURVEY OF 1972, Volume IV: Alarm Displays, Security Equipment, and Surveillance Equipment.

National Bureau of Standards Report 73-215. LEAA POLICE EQUIPMENT SURVEY OF 1972, Volume VI: Body Armor and Confiscated Weapons.

National Bureau of Standards Report 73-216. LEAA POLICE EQUIPMENT SURVEY OF 1972, Volume VII: Patrolcars.

NBSIR 73-214

**LEAA POLICE EQUIPMENT SURVEY OF 1972
VOLUME V: HANDGUNS AND HANDGUN
AMMUNITION**

S. Bergsman, E. Buntin, P. Klaus

Technical Analysis Division
Institute for Applied Technology
National Bureau of Standards
Washington, D. C. 20234

Final, July 1971 – August 1973

Prepared for
National Institute of Law Enforcement and Criminal Justice (NILECJ)
Law Enforcement Assistance Administration (LEAA)
Department of Justice
Washington, D. C. 20530



U. S. DEPARTMENT OF COMMERCE, Frederick B. Dent, Secretary
NATIONAL BUREAU OF STANDARDS, Richard W. Roberts, Director

ACKNOWLEDGEMENTS

We are grateful to the 445 police departments throughout the United States who contributed their time and knowledge to make this report possible. Special thanks go to the police departments whose officers and administrators helped the survey team during the developmental and testing phases of the work. In addition we thank Jacob J. Diamond, Chief of the Law Enforcement Standards Laboratory of the National Bureau of Standards (NBS) and Nicholas J. Calvano of the Measurement Engineering Division of NBS for expert advice concerning handguns and ammunition. The support and assistance of Lester Shubin, NILECJ, project monitor and consultant, is also gratefully acknowledged.

Although there are only three authors for this report, the work could not have been accomplished without the capable and conscientious efforts of the many members of the Technical Analysis Division who provided support for the whole survey effort:

William L. O'Neal for his help in computerizing the sample selection and for helping to design and program the interactive record-keeping system; Jenny L. Eldreth and P. Clare Peiser for helping maintain the computerized record-keeping system; Sandra J. Mumford for supervising the coding/editing of the questionnaires; June R. Cornog for her advice, support and help with initial interviews; Gail B. Hare for conducting pretest interviews; Diane R. Beall for the many typings of various versions of the questionnaires; Suellen Halpin, Mary L. Friend, and Dwight F. Doxey, for making follow-up telephone calls; Lorraine S. Freeman for her administrative support; Karen Jackson, Cassandra Streeter and Janice Davis, summer employees, for their help with questionnaire coding and record-keeping; and Mary Hawkins and Jo Copeland for typing the report.

Michael R. Vogt receives special thanks for his help in carrying out the computerized edit and tabulation of the data. We also gratefully acknowledge the help of Robert J. Cunitz in editing and reviewing the report.

TABLE OF CONTENTS

	<u>Page</u>
REPORTS FROM THE LEAA POLICE EQUIPMENT SURVEY	
ACKNOWLEDGEMENTS	iii
LIST OF TABLES	vii
EXECUTIVES' SUMMARY	xi
 1.0 INTRODUCTION	 1
1.1 Project Background	1
1.2 Sample Design	2
1.3 Questionnaire Administration	7
1.4 Development and Design of the Handguns DQ	9
1.5 Characteristics of Subsample Groups	10
 2.0 QUESTION BY QUESTION DISCUSSION	 14
2.1 Advice to the Reader	14
2.2 Discussion	17
2.2.1 Characteristics of Respondents	17
2.2.2 On Duty Use of Handguns	19
2.2.3 Characteristics of Handguns Used On Duty	22
2.2.3.1 Caliber.	24
2.2.3.2 Revolver/Automatic	26
2.2.3.3 Model/Manufacturer	27
2.2.3.4 Barrel Length.	28
2.2.4 Characteristics of Ammunition Used	31
2.2.4.1 Bullet Type	31
2.2.4.2 Bullet Weight	32
2.2.4.3 Ammunition Manufacturer	33
2.2.5 Off Duty Use of Handguns	35
2.2.6 Problems With Handguns	37
2.2.7 Problems Associated With Handgun Ammunition	40
 APPENDIX A: Handguns and Handgun Ammunition Questionnaire	
APPENDIX B: Data Tables	

LIST OF TABLES

1.0 INTRODUCTION

<u>Table Number</u>		<u>Page</u>
1.2-1	Stratification Categories	3
1.2-2	Number of Police Departments by Region and Type	4
1.2-3	Number of Sample Departments Selected to Receive the Detailed Handguns and Hand- gun Ammunition Questionnaire	6
1.3-1	Number of Sample Departments Returning Acceptable Detailed Handguns and Handgun Ammunition Questionnaires	9
1.5-1	Percent of Sample Departments Having Each Activity	11
1.5-2	Descriptive Data by Department Type (Means) . .	13
1.5-3	Descriptive Data by LEAA Region (Means)	13

2.0 QUESTION BY QUESTION DISCUSSION

<u>Table Number</u>		<u>Page</u>
i	Rank of Primary Respondent for Handguns Questionnaire	18
ii	Number of Years of Law Enforcement Experience of Respondents to the Hand- guns DQ	18
1-1	<u>Departments</u> Having At Least One Officer Using a Handgun of Specified Caliber; and Percentages of <u>Officers</u> Using Handguns of Specified Caliber on Duty	20

1-2	Numbers of Officers Carrying .38, .357, .45, 9mm, and Other Calibers of Handguns On Duty	21
1-3	<u>Estimated</u> Numbers of Officers Carrying Various Calibers of Handguns in U.S. Police Departments On Duty	22
2A/3A-1	Departments With Officers Using More Than One Caliber of Handgun On Duty	23
2A/3A-2	Handguns Cited as Most Used or Second Most Used, by Caliber	24
2A/3A-3	Caliber of "Most Used" and "Second Most Used" Handgun	25
2A/3A-4	Of The Departments Citing the .38 and the .357 as Most Used Handguns, Percentages Listing .38/.357, Another Caliber, or No Second Most Used Handgun.	26
2B/3B	Most Used Handguns and Second Most Used Handguns Which Were Revolvers.	27
2C-1	Departments Using Handguns of Specified Manufacturers as Their Most Used Handgun	28
2D	Percentages of <u>Most Used</u> Handguns of Various Calibers With Barrels of Specified Length.	29
2D/3D-1	Most Used and Second Most Used Handguns With Barrels of Various Lengths	29
2D/3D-2	.38 and .357 Caliber Handguns With Barrels of Specified Length	30
2E/3E-1	Departments Using Specified Bullet Type.	31

<u>Table Number</u>		<u>Page</u>
2E/3E-2	Of the Departments Using <u>Only One Type of Bullet</u> , Percentages Using Specified Bullet Type	32
2E/3E-3	Departments Using Ammunition With Specified Bullet Weights.	33
2E/3E-4	Departments Using Ammunition Made by Specified Manufacturer.	33
2E/3E-5	Of the Departments Using Only One Brand of Ammunition, Percentages Using Specified Brand of Ammunition	34
4	Not Reporting Officers' Use of Handguns Off Duty	36
4/1	Officers and Departments Using Specified Calibers of Handguns On Duty and Off Duty.	37
5-1	Departments Listing At Least One Handgun Problem	38
5-2	Of the Departments Listing At Least One Problem, Percentages Citing Specified Problem	39
6-1	Departments Reporting at Least One Problem With Handgun Ammunition	41
6-2	Of the Departments Citing at Least One Problem with Handgun Ammunition, Percentages Citing Specified Problem.	41

EXECUTIVES' SUMMARY:

I. SUMMARY OF BACKGROUND AND METHODOLOGY

A. Background (pp. 1-2)

- Law Enforcement Standards Laboratory (LESL) was established in 1970 and became part of the NILECJ Equipment Systems Improvement Program (ESIP).
- NILECJ asked the Behavioral Sciences Group of the National Bureau of Standards to develop and carry out a procedure to get information from the users of law enforcement equipment.
- "User" information would aid NILECJ in setting priorities for LESL programs and would provide some detailed information so that research to develop standards could begin.
- In addition, gathering information from the users would help to make police agencies aware of LESL and ESIP.
- A nationwide mail sample survey was selected as the best procedure to collect user information.
- An Equipment Priorities Questionnaire (EPQ) and six Detailed Questionnaires (DQs) were developed and administered. A separate report was prepared for each of these seven questionnaires.

B. Design of Questionnaires (pp. 8-9)

- Questionnaires were developed in conjunction with NILECJ, LESL, and cooperating police departments. Questionnaires were pretested at various times with approximately 45 police departments.
- The EPQ was designed to provide information about priority needs for standards for various types of equipment.
- In addition, the EPQ asked for data about numbers of full- and part-time officers, activities performed in the department, budget, size of jurisdiction, etc.
- The six DQs (Alarms, Security and Surveillance Equipment; Communications Equipment and Supplies; Handguns and Handgun Ammunition; Lights and Sirens; Body Armor and Confiscated Weapons; and Patrolcars) were each developed separately.

- The DQs asked about kinds and quantities of equipment in use, problems with existing equipment, suggestions for improving equipment, needs for standards related to the equipment, etc. Although entitled Detailed Questionnaires, these questionnaires were designed to give an overview of the use of specific items of equipment.

C. Sample (pp. 2-6)

- The population sampled was made up of all police departments listed in a computerized file compiled and maintained by the LEAA Statistical Service.
- Courts, correctional institutions, forensic labs, special police agencies, etc., were excluded.
- The sample was stratified by LEAA Geographic Region (10 Regions) and by Department Type (7 Department Types: State Police; County Police and Sheriffs; City Departments with 1-9 Officers; City Departments with 10-49 officers; City Departments with 50 or more officers, excluding the Fifty Largest Cities; the Fifty Largest U.S. Cities by population; and Township Departments).
- Overall, approximately 10% of the 12,836 departments in the population were selected as respondents (see Table 1.2-2).
- The Equipment Priorities Questionnaire was sent to every sample department (1386). Each Detailed Questionnaire was sent to all States, to all of the Fifty Largest Cities, and to a randomly selected subsample of the main sample (about 530 departments received each DQ).
- Thus, States and the Fifty Largest Cities were asked to fill in all seven questionnaires. Each of the remaining 1286 departments were asked to fill in the EPQ and two of the DQs.
- The sample for the Handguns and Handgun Ammunition DQ consisted of 528 departments (see Table 1.2-3).

D. Questionnaire Administration (pp. 7-8)

- Stringent control of administration was required.
- Introductory letters were sent to heads of departments asking cooperation.
- On June 1, 1972, questionnaire packages were mailed.

- In July 1972, follow-up by self-return postcard was begun.
- In August 1972, follow-up by telephone was begun. Departments which had not returned questionnaires were called. Also, calls were made to clear up ambiguities in the returned questionnaires. About 1300 calls were made. About 70% of the sample departments were called at least once.
- Each questionnaire was edited and coded by a specialized team to ensure consistency; the data were then keypunched and tabulated.
- Completed questionnaires were accepted for tabulation through January 7, 1973.

E. Rates of Return (pp. 8-9)

- 83% of the 1386 sample departments returned usable EPQs.
- 84% of the 528 sample departments returned usable Handguns DQs.
- 81 - 85% of the other DQ subsamples returned usable questionnaires.
- Highest rates of return (over 90%) were from States, the Fifty Largest Cities, and Cities with 50 or more officers.
- Lowest rates of return (less than 75%) were from Counties and Townships.

F. Characteristics of Responding Departments * (pp. 10-14)

- The activities most commonly carried out by the respondents (to the EPQ) were Serving Traffic and Criminal Warrants (88%), Traffic Safety and Traffic Control (87%), and Intra-departmental Communications (87%).
- All of the responding Fifty Largest Cities said they provided In-House Training and Criminal Investigations. This compared to 68% and 86%, respectively, of all responding departments.
- Only 13% of all respondents had Crime Laboratories. 73% of the Fifty Largest Cities and 55% of the States had Crime Laboratories.
- About three-fifths of the departments in all Department Types were providing Emergency Aid and Rescue, ranging from 60% of the Cities with 50 or More Officers to 67% of the Counties.

* Data reported in this section were based on the answering of 1386 departments which filled in the Equipment Priorities Questionnaire. These departments include, but are not limited to the respondents to the Handguns DQ. For complete information see LEAA Police Equipment Survey of 1972, Volume I.

- Overall, the reported Equipment Budgets represented somewhat over 10% of the Total Budgets reported.
- Among Department Types there was a wide range of total equipment expenditures, from a mean of about \$10,000 for Cities with 1-9 Officers to a mean of almost \$2.6 million for the Fifty Largest Cities.
- One of the Fifty Largest Cities reported an Equipment Budget of \$40 million.
- Overall, the Fifty Largest Cities reported a mean of 2491 Full-Time Sworn Officers. However, one of the Fifty Largest Cities had 27% of all the Full-Time Officers reported by that Department Type and another had about 12%.

G. Presentation of Data (pp. 14-17)

- Data in this report are presented in two forms: Text tables and full tables (Appendix B.) Text Tables do not always present a complete break out of the data.
- All tables (text and full) present the data in unweighted form, (i.e., numbers and percentages of the responding departments from the sample for this questionnaire, not figures that have been weighted to expand the data to the total population of police departments in the U. S.)
- The sample selected for this questionnaire was not proportional to the total population of police departments. If decisions are to be made which require estimates of population figures, the appropriate extrapolation must be performed. (See Appendix B.)

II. Summary of Results

A. On Duty Use of Handguns (pp. 19-23)

- 94% of the responding departments reported at least one officer using a .38 caliber handgun on duty.
- 80% of the officers in those departments were using .38s.
- States (59%), Townships (56%), and Counties (55%) reported the lowest percentages of officers using .38s on duty, while the Fifty Largest Cities (88%) and Cities 50+ (81%) reported the highest percentages.
- Responding States (36%), Townships (36%), and Counties (40%) had the highest percentages of officers using .357 caliber handguns on duty, while the Fifty Largest Cities (9%) and Cities 50+ (16%) had the lowest percentages.

- The .45 Caliber and the 9 mm were each being used by only 1% of the officers in the responding departments.
- The 445 responding departments reported 179,891 officers carrying handguns.
- Estimates of the total population of on-duty handguns in the U.S. showed 70% of all officers using .38s and 25% using .357s.

B. Most Used and Second Most Used on Duty Handguns (pp.24-30)

- Departments were asked a series of questions about the handgun they had more of in their department than any other (Most Used Handgun), and the same questions about the handgun caliber they had next most of in their department (Second Most Used Handgun).
- 42% of the responding departments reported using only one caliber of handgun.
- The answers about "Most Used Handgun" represented about 91% of all the handguns reported.
- 99% of the handguns that were Most Used or Second Most Used were either .38s or .357s. (82% and 17% respectively.)
- When the .38 caliber was listed as Most Used Handgun, the .357 was the most likely caliber to be listed as Second Most Used Handgun, and vice versa.
- Only 8 of the 445 responding departments said that some caliber other than .38 or .357 was used by more of their officers on duty than any other.
- Almost all (99%) of the reported on duty handguns were revolvers.
- 97% of the responding departments were using only handguns produced by one or both of two manufacturers.
- Of all reported Most Used and Second Most Used Handguns, 80% had barrels 3-5 inches long.
- States reported a higher percentage of handguns with barrels longer than 5 inches (29%) than did any other Department Type.

C. Ammunition Used with Most Used and Second Most Used Handguns
(pp. 31-33)

- About half of the responding departments were using Lead bullets in their Most Used Handguns, 24% used Hollowpoint and 15% used Jacketed.
- About two-thirds of the departments were using only one bullet type for their Most Used Handguns, and about half of these were using lead bullets exclusively. 13% were using Hollowpoint exclusively.
- 73% of the responding departments were using ammunition with bullet weights of 151-160 grains, and few departments were using ammunition with bullet weights higher than this.
- 59% of the responding departments were using only one brand of ammunition with their Most Used Handguns.
- Almost 3/4 of the departments that were using only one brand of ammunition were using ammunition made by one of two manufacturers (50% and 22%, respectively).

D. Off Duty Use of Handguns (pp. 35-37)

- Only 78% of the responding departments answered the question concerning off duty use of handguns. This is not a good measure of the proportion of departments that use handguns off duty.
- 51% of State departments did not answer the question on off duty use of handguns. 75% or more of all other Department Types did give data about off duty handgun use.
- Of the 110,534 officers reported to be carrying off duty handguns, 86% were carrying .38s, 6% were carrying .357s, and 4% were carrying 9mm. This compares to 80%, 17%, and 1% respectively, of the 179,891 officers reported carrying on duty handguns.
- Of the 345 departments that reported off duty handgun use, 96% reported at least one officer using a .38 off duty; 29% reported .357 use; 30% reported 9 mm use; 21% reported .45 use; 22% reported .32 use; and 23% reported .25 Automatic use. (Only two calibers of handguns were represented in more than twenty percent of the departments for on duty use.)

E. Problems With Handguns (pp. 27-40)

- More than half of the responding departments had either had no problems with their handguns in the last five years (37%) or left this question blank (18%).
- 72% of States and 72% of the Fifty Largest Cities cited at least one handgun problem compared to 46% of all responding departments.
- The two most frequently mentioned problems were those associated with the Cylinder, and those associated with the Hammer or Firing Pin.

F. Problems With Handgun Ammunition (pp. 40-42)

- Only about one-fourth of the responding departments described a problem with handgun ammunition.
- A much higher percentage of the Fifty Largest Cities (61%) listed a problem than any other Department Type.
- None of the 27 Township departments and only seven departments in Cities with 1-9 officers listed an ammunition problem.
- Problems cited by one-fourth or more of the departments citing difficulties were Power/Penetration Too Low (30%), Knockdown Power Insufficient (27%), and Primer (25%).

1.0 INTRODUCTION

1.1 Project Background

During the past several years, law enforcement agencies in the United States have become more aware of the importance of equipment in the performance of their duties. Much of their equipment had originally been designed for other uses and had to be modified. Other equipment items had to be used as given. No standards existed against which equipment performance could be measured nor were any standard test methods or procedures available. It has been difficult for agencies to compare the performance of equipment items. Recognizing this problem, in 1970, the Law Enforcement Assistance Administration (LEAA) of the Department of Justice began a concentrated program toward the improvement of law enforcement equipment.

As the first step in its Equipment Systems Improvement Program (ESIP), LEAA, in cooperation with the Department of Commerce established a Law Enforcement Standards Laboratory (LESL) at the National Bureau of Standards (NBS). The broad goal of LESL is to establish voluntary performance standards which can be used as guidelines for the selection of equipment by law enforcement agencies. Additionally, LESL is developing standard test methods and procedures, so that the relative performance of similar items may be evaluated by departments themselves.

In order to provide equipment user information for the ESIP program, in 1971 the National Institute of Law Enforcement and Criminal Justice (NILECJ) of LEAA asked the Behavioral Sciences Group of the Technical Analysis Division at NBS to gather information from the users of law enforcement

equipment about their specialized equipment needs and problems. Although face-to-face interviews with a large sample of representatives from law enforcement agencies would have been desirable, time and manpower constraints led to the development of a nationwide, mail sample survey having two general objectives: (1) To assist NILECJ in the establishment of priorities for LESL's standards development activities; and (2) to obtain detailed information about certain broad equipment categories so that research to develop standards in these areas could begin.

This report fulfills part of the second general objective and the associated survey questionnaire (see Appendix A) will be referred to as the Handguns and Handgun Ammunition Detailed Questionnaire (DQ). The remainder of the second objective is accomplished in the reports of the other five DQs: Alarms, Security and Surveillance Systems; Communications Equipment and Supplies; Sirens and Emergency Warning Lights; Body Armor and Confiscated Weapons; and Patrolcars. The first objective (above) is accomplished in the report on the Equipment Priorities Questionnaire (EPQ).^{*} A complete listing of these seven reports may be found on the inside front cover of this report.

1.2 Sample Design

Although the objective of ESIP is to serve all types of law enforcement agencies, this particular study was purposefully limited to police departments as the largest single group of law enforcement agencies with

^{*} LEAA POLICE EQUIPMENT SURVEY OF 1972, Volume I: The Need for Standards Priorities for Police Equipment.

identifiable equipment needs. No attempt was made to survey correctional institutions, courts, forensic laboratories, or special police agencies such as park police, harbor patrols or university police. The computerized directory of approximately 14,000 police agencies, compiled and maintained by LEAA's Statistics Division, provided the population from which the sample was drawn. Care was taken to exclude the double listings that existed for some agencies. (Details of the selection process are given in Appendix B of the Equipment Priorities Questionnaire.)

The final list of 12,842 departments was cross-stratified by LEAA geographic region and department type by the mutual agreement of NBS and NILECJ. The assignment of states to regions and the seven department types chosen for study are shown in Table 1.2-1.

Table 1.2-1. Stratification Categories

DEPARTMENT TYPES:

State Police
County Police & Sheriffs
City with 1-9 Officers
City with 10-49 Officers
City with 50 or more Officers*
The 50 Largest U.S. Cities**
Township Departments

LEAA GEOGRAPHIC REGIONS:

1 = Conn., Maine, Mass., N.H., R.I.,
Vt.
2 = N.J., N.Y.
3 = Del., Md., Penn., Va., W.Va., D.C.
4 = Ala., Fla., Ga., Ky., Miss., N.C.,
S.C., Tenn.
5 = Ill., Ind., Mich., Ohio, Wis., Minn.
6 = Ark., La., N.M., Okla., Tex.
7 = Iowa, Kan., Mo., Neb.
8 = Colo., Mont., N.D., S.D., Utah, Wyo.
9 = Ariz., Calif., Nev., Hawaii
10 = Alas., Idaho, Ore., Wash.

* Does not include the 50 Largest Cities.

** By Population, U.S. 1970 Census.

The breakdown of the population of police departments by cross-strata is exhibited in Table 1.2-2. As can be seen from the table, there were no Townships in Regions 4, 6, 7, 8, 9 and 10. Almost 63% of the departments

Table 1.2-2 Number of Police Departments by Region and Type

LEAA REGION

DEPARTMENT TYPE	1	2	3	4	5	6	7	8	9	10	TOTAL
State	6	2	5	8	6	5	4	6	4	4	50*
County	66	84	257	764	536	506	413	288	103	120	3137
City (1-9 Officers)	27	348	713	979	1470	703	611	283	135	217	5486
City (10-49 Officers)	40	237	166	344	508	230	142	71	168	79	1985
City (50 or More Officers)	60	64	36	83	119	46	23	19	87	17	554
50 Largest Cities	1	4	5	8	10	8	3	1	8	2	50
Township	629	349	362	-	234	-	-	-	-	-	1574
TOTAL	829	1088	1544	2186	2883	1498	1196	668	505	439	12,836

* Questionnaires were actually sent to 56 State Police departments since there were 6 State Departments which listed two police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of these 6 agencies as described in Volume I, Appendix B, page B-2.

Note: The conventions used in displaying and reporting the results of the questionnaires are presented on page 16, section "g".

were City police, 43% having 1-9 full-time officers. County departments comprised about 24% of the population. By Region, the smallest (Region 10) contained only 3.4% of the police departments, while Region 5, the largest, had 22.5%. The variation in the number of departments in a cell (Region/Department Type combination) was even greater than that across the strata, i.e., the number of departments in each cell ranged from 0 to 1470.

The considerations discussed in the previous paragraph led to the sampling plan discussed briefly below. All of the State departments and the Fifty Largest City departments were included in the sample and were asked to complete all six DQs, i.e., they were sent the entire package of seven questionnaires. For the remaining cells the variation in cell size presented a problem: If the same fraction of the entire population was to be selected from the members of each cell, a constant sampling fraction large enough to make the total sample manageable would yield too few sample units in small cells. To solve this problem, a fixed sample of 30 police departments/cell was chosen, wherever possible, resulting in a different sampling fraction for each cell. A fixed sample size of 30 departments/cell was chosen to facilitate the equitable distribution of the six DQs. This plan resulted in sending the Handguns DQ to 528 departments.

The departments were selected randomly within each cell, from the total cell population, each department (other than the States and Fifty Largest Cities) receiving two DQs. Thus, in cells having 30 sample units, the Handguns DQ was mailed to 10 departments; cells having fewer sample units were allocated proportionally fewer Handguns DQs. Table 1.2-3 presents the total sample for the Handguns DQ by Region and Department Type.

Table 1.2-3. Number of Sample Departments Selected to Receive the Detailed Questionnaire:
Handguns, by Region and Department Type.

DEPARTMENT TYPE:

LEAA GEOGRAPHIC REGION:

	1	2	3	4	5	6	7	8	9	10	Total
State*	6	2	5	8	6	5	4	6	4	4	50
County	10	10	10	10	10	10	10	10	10	10	100
City 1-9 Officers	9	10	10	10	10	10	10	10	10	10	99
City 10-49 Officers	10	10	10	10	10	10	10	10	10	10	100
City 50+ Officers	10	10	10	10	10	10	8	6	10	5	89
50 Largest Cities	1	4	5	8	10	8	3	1	8	2	50
Townships**	10	10	10	--	10	--	--	--	--	--	40
Total	56	56	60	56	66	53	45	43	52	41	528

* Questionnaires were actually sent to 56 State departments since there were six State departments which listed two police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of these six agencies.

** Township departments exist only in Regions 1, 2, 3 and 5.

Once the sample was selected, each sample unit was assigned a unique seven-digit identification number coding region, type, and questionnaire assignment.

1.3 Questionnaire Administration

From the beginning of the project, it was evident that stringent control would be required in administering the questionnaires to ensure a high rate of response. Computer-stored daily status records were input via a teletypewriter for each sample department. In general, the following procedure was used:

- (a) Each department in the sample was mailed a letter, signed by the director of NILECJ, addressed to the head of the department. This letter introduced the survey and requested cooperation.
- (b) About one week later, the questionnaire packages were mailed.
- (c) Departments not returning the questionnaires within a month were identified by the computer and were sent a self-return postcard requesting information as to the status of the questionnaires. Departments not receiving the questionnaire package were sent another; those not returning the postcard were placed on a list for telephone follow-up.
- (d) About a month and a half later, departments with which no contact had been made were called by telephone.
- (e) Returned questionnaires were reviewed for completeness and either coded for keypunching or filed for telephone call-back to supply missing data or to resolve ambiguities.

Considerable effort was expended to ensure a high rate of response, and this effort was rewarded with an 84% response for the Handguns DQ, and between 80% and 85% for each of the other questionnaires. In the course of the survey more than 70% of the sample departments were contacted at least once by telephone. More than 1300 phone calls were made by the survey team.

The distribution of respondents (departments which returned usable Handguns DQs) is exhibited in Table 1.3-1. The highest percentages of response were from the States and larger Cities (89-94%), while Counties and Townships had the poorest response rates (under 75%). These data would seem to be partly explained by the fact that the larger departments use more equipment than do smaller departments and, therefore, have a greater interest in developing standards.

1.4 Development and Design of the Handguns DQ

The survey plan and questionnaire design (of all seven questionnaires) evolved over a 12-month period. During this time, the survey team consulted at length with NILECJ equipment experts, LESL program managers, and equipment manufacturers. In addition, the officers and administrators of about 45 police departments served as consultants and/or as respondents for pre-tests of various versions of the questionnaires.

The Handguns DQ, in its final form, is reproduced in Appendix A. This DQ asked respondents to identify the kinds of handguns being used by officers in the department both on duty and off duty; to fully describe the handgun used by more of their officers than any other and the handgun used by the next greatest number of officers; to provide data on the types of ammunition

Table 1.3-1. Number of Sample Departments Returning Acceptable Detailed Questionnaire:
Handguns and Handgun Ammunition.

LEAA GEOGRAPHIC REGION:												% TOTAL SAMPLE
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>Total</u>	
State*	6	2	5	8	6	5	3	6	3	3	47	94%
County	5	7	6	8	8	5	8	9	10	7	73	73
City 1-9 Officers	7	10	7	9	9	7	9	8	9	9	84	85
City 10-49 Officers	9	8	7	9	10	8	9	10	10	9	89	89
City 50+ Officers	9	8	10	9	8	10	7	5	8	5	79	89
50 Largest Cities	1	3	4	7	8	8	3	1	8	2	45	90
Townships**	7	9	7		4						27	68
Total	44	47	46	50	53	43	39	39	48	35	444	84%
PERCENT TOTAL SAMPLE	79%	84%	77%	89%	80%	81%	87%	91%	92%	85%	84%	

* Questionnaires were actually sent to 56 State departments since there were six State departments which listed two police agencies without reference to a common central agency. However, only one set of questionnaires was accepted from each of these six agencies.

** Township departments exist only in Regions 1, 2, 3 and 5.

being used and to discuss problems with handguns and ammunition. The questionnaire was limited to general topics because: (1) It was not possible, considering the scope of the present survey, to explore in a detailed manner specific information about all types of weapons being used in the department; and (2) it was felt that the general data gathered in the present effort would provide important direction for research in the development of standards, the main objective of the survey.

1.5 Characteristics of Subsample Groups

The EPQ of the LEAA Police Equipment Survey* requested data from each department about population served, physical size of jurisdiction served, type of jurisdiction, number of full- and part-time officers, approximate total, equipment, and personnel budgets during 1971, and activities handled by the department.

Table 1.5-1 presents a partial tabulation, by department type, of the responses to a check list of 30 typical police activities by the respondents to the EPQ. (The EPQ respondents include, but are not limited to, the respondents to the Handguns and Handgun Ammunition DQ. See Section 1.2.) The activities most frequently checked by all departments were: (1) Serve Traffic and Criminal Warrants (88%), (2) Traffic Safety and Traffic Control (87%), and (3) Communications for Own Department (87%). The activity with the most consistent level across all Department Types was that of Emergency Aid and Rescue, ranging from 60% (Cities with 50+ Officers) to 67% (Counties).

* LEAA Police Equipment Survey of 1972. Op. cit.

Table 1.5-1. Activities Handled by AT LEAST ONE-THIRD of That Department Type by Department Type, and Percent of Total Departments Having Each Activity

DESCRIPTION OF ACTIVITY:

DESCRIPTION OF ACTIVITY:	State County			City			City			City			Largest			Township			Total		
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Serve Traffic and Criminal Warrants	70	89	84	89	94	87	94	94	93	88											
Traffic Safety and Traffic Control	92	56	94	96	96	98	96	96	94	87											
Communications for Own Department	94	86	76	95	94	96	94	94	70	87											
Criminal Investigation	66	86	71	95	97	100	97	97	79	86											
Police Training for Own Department	98	55	48	77	87	100	87	100	42	68											
Custody/Detention-Less than 1 Day	-	79	51	73	72	80	72	80	43	65											
Breath-Alcohol Test	89	46	47	72	83	91	83	91	49	64											
Emergency Aid and Rescue	62	67	62	63	60	67	60	67	62	63											
Public Building Protection	-	40	63	60	58	44	58	44	68	54											
Service Function	-	-	48	55	60	60	60	60	42	48											
Animal Control (Dog Catcher)	-	-	58	63	42	-	42	-	37	44											
Highway Patrol	96	38	48	36	-	-	-	-	88	43											
Maintenance of Police Buildings	51	36	34	41	48	47	48	47		40											
Custody/Detention-1 Week or Less	-	73		36	46	49	46	49		38											
Communications for Other Agency	66	56		40	-	-	-	-		36											
Serve Civil Process	-	88			-	-	-	-		32											
Police Training for Other Agency	77	-			42	84	42	84		24											
Custody/Detention-Up to 1 Year	-	78			-	-	-	-		22											
Underwater Recovery	34	42			-	42	-	42		19											
Bomb Disposal	45				-	82	-	82		17											
Polygraph	62				36	90	36	90		17											
Vehicle Inspection	55					-		-		17											
Crime Laboratory	55					73		73		13											
Narcotics Laboratory Analysis	43					62		62		11											
Harbor Patrol	-					-		-		7											
Lab Analysis for Blood Alcohol	34					53		53		7											
Other	-									6											
Coroner	-									5											
Tests for Drivers License	34									3											
Custody/Detention-More than 1 Year										3											

Higher percentages of State and Fifty Largest City departments than of other departments were handling certain of the 30 activities. For example: All of the Fifty Largest City departments responding, and 98% of the responding State departments, said that their departments provided Police Training for Own Department. These compare to 68% for the total sample of departments. All of the responding Fifty Largest Cities said that they handled Criminal Investigation in their own departments. This compares to 86% of the total sample of departments. Although only 13% of the departments overall had Crime Laboratories, 73% of the Fifty Largest Cities and 55% of the States reported having them.

Counties appeared to be the only Department type with significant responsibilities for custody and detention for more than 1 week. Seventy-eight percent of these departments had Custody/Detention-Up to 1 Year, as compared with 22% of all responding departments.

Tables 1.5-2 and 1.5-3 present summaries of descriptive data by Department Type and LEAA Region, respectively. As can be seen from the column for Annual Equipment Budget (Table 1.5-2), there was a wide range of expenditures among different Department Types: From a mean of about 10 thousand dollars for responding Cities (1-9) to almost 2.6 million dollars for the Fifty Largest Cities. Overall, equipment budgets represented somewhat over 10% of the Annual Total Budgets.

The mean Number of Part-time Officers was based on those respondents having part-time officers in their departments. Of the 45 responding from the Fifty Largest Cities, only six had part-time officers, including one city which had nearly 6000. Thus, the mean value of 1115 for this department type is somewhat misleading. It should be noted that the category Part-time Officers included officers described as auxiliary, volunteer, reserve,

Table 1.5-2. Descriptive Data by Department Type (Means)

Department Type	Area (Sq. Miles)	Number of		Annual Total Budget	Annual Equipment Budget	Annual Personnel Budget
		Full-Time Officers	Part-Time Officers			
50 Largest	187	851342	2491	1115	\$43,268,865	\$2,669,920 \$34,712,818
State	62580	3936410	889	18	\$16,377,358	\$2,304,339 \$12,020,572
County	1518	130254	60	25	\$1,089,919	\$58,539 \$859,984
City (50+)	31	83344	132	26	\$1,733,340	\$173,099 \$1,407,177
City (10-49)	12	15849	22	9	\$257,927	\$24,362 \$206,187
Township	28	13228	14	8	\$175,654	\$20,854 \$141,675
City (1-9)	9	5038	8	5	\$82,381	\$9,764 \$60,061

Table 1.5-3. Descriptive Data by LEAA Region (Means)

LEAA Region	Area (Sq. Miles)	Number of		Annual Total Budget	Annual Equipment Budget	Annual Personnel Budget
		Full-Time Officers	Part-Time Officers			
1	750	158112	96	18	\$1,360,155	\$135,130 \$979,911
2	648	240781	365	97	\$7,148,315	\$148,172 \$5,265,546
3	1096	245733	216	7	\$3,412,567	\$435,153 \$2,879,293
4	3691	340996	151	11	\$2,318,382	\$248,600 \$1,767,292
5	2652	448174	283	8	\$4,916,607	\$431,478 \$3,879,374
6	5738	271386	160	17	\$2,193,823	\$160,363 \$1,709,910
7	2379	112094	84	9	\$1,220,385	\$121,001 \$983,696
8	6346	83023	54	9	\$728,549	\$77,081 \$563,463
9	4218	372094	281	46	\$5,743,553	\$728,801 \$4,528,692
10	3580	104877	69	9	\$1,253,894	\$82,198 \$1,011,604

school-crossing guard, dispatcher, summer, special agent, traffic supervisor, posse, and cadet. All of these classifications were counted in the Part-time Officer category since it has different meanings for different departments.

Variations in these descriptive averages by LEAA region (Table 1.5-3) were considerably smaller than variations by department type. Regions 1 and 8 had smaller budgets than the others, primarily because each contained only one of the Fifty Largest Cities.

2.0 QUESTION BY QUESTION DISCUSSION

2.1 Advice to the Reader

In reading Section 2, certain points should be kept in mind:

- (a) THIS REPORT IS NOT AN EVALUATION OF ANY OF THE EQUIPMENT DESCRIBED OR DISCUSSED WITHIN IT. IT IS A PRESENTATION OF INFORMATION AND OPINIONS OF A STRATIFIED RANDOM SAMPLE OF POLICE DEPARTMENTS GIVEN IN RESPONSE TO A SPECIFIC SET OF QUESTIONS. IT DOES NOT, IN ANY WAY, REFLECT OBJECTIVE TESTING OF ANY EQUIPMENT BY THE NATIONAL BUREAU OF STANDARDS.
- (b) The report reflects only what police departments were willing and able to say in response to a specific set of questions. In most cases, no attempt was made to verify the accuracy of the information given or the level of sophistication of the respondent.
- (c) Each discussion begins with the presentation of the question that appeared in the questionnaire, and in most cases the choices supplied, if any, are set off in a box. However, the

reader is cautioned to become familiar with the questionnaire sent to sample departments (see Appendix A) and to evaluate the data in terms of the exact questions asked.

- (d) The ~~text~~ tables that appear in Section 2 are almost never the complete tables that were tabulated for that question. Data categories for text tables may have been collapsed from the full table, or certain categories of interest may have been singled out for fuller discussion. Appendix B contains the complete tables from which the text tables were extracted. Text tables have been numbered after the question number (e.g., the text tables for question 6A. would be numbered 6A-1, 6A-2, etc.). The tables in Appendix B are also numbered after the question number, in the same manner. In some cases, tables that appear in Appendix B will not have been discussed at all in the text.
- (e) Data in the text of this report are usually presented by nearest whole percent of the group under consideration. In Appendix B, the data are usually presented by number of respondents and percent. Because of statistical limitations imposed by the sample sizes used in this study, the reader is cautioned to be wary of assigning importance to percentage differences of less than 5% when percentages are based on the total number of respondents, and to percentage differences of less than 10% when percentages are based on one of the sub-sample groups, (e.g., a particular Department Type or Region). No statistical tests of significance are reported.

- (f) Data were always tabulated by each of the choices supplied, if any, in the questionnaire. Any "other" choices written in by the respondents were also tabulated and/or recorded verbatim. In most cases, the numbers of respondents giving a specific "other" response do not reflect the numbers of respondents who would have marked that choice if it had been one of those provided. Therefore, in most cases, this report lists or gives examples of "other" responses, but does not present numbers or percents of departments giving that response. For those questions for which choices were not provided in the questionnaire, coding categories were developed after approximately one-fourth of the questionnaires had been returned.
- (g) The subsample groups (Department Types and Regions) are capitalized when they are discussed in the text. In addition, the four Department Types which are composed of City departments are at times discussed as a group. In those cases, the word "city" is also capitalized. The following convention has been adopted in the report to designate the four City Department Types:

City with 1-9 Officers = City (1-9)
City with 10-49 Officers = City (10-49)
City with 50 or more Officers = City (50+)
The Fifty Largest Cities = Fifty Largest or 50 Largest

When the subsample groups are discussed (e.g., "Counties said..." or "Cities (1-9) said ...") the reference is to the responding departments from one of the sample strata. It is particularly important to note that when the text or tables

refer to "All Departments" or "All Responding Departments," the reference is to all responding departments from the sample described in Section 1.2. This sample was not proportional to the total population of police departments, and although it is possible to do so, the data in this report have not been weighted to allow direct extrapolation to the total population. (See Appendix B, page B-1.)

- (h) Questions which asked departments to identify manufacturers of their equipment were asked in this manner only to make the question clearer; NOT TO EVALUATE A MANUFACTURER'S PRODUCT.

2.2 Discussion

2.2.1 Characteristics of Respondents

TITLE OF RESPONDENT

All of the questionnaires in the LEAA Police Equipment Survey were mailed to the Chief or highest official of the department with a request that the questionnaires be directed to the person or persons within the department who were felt to be best qualified to answer the questions.

The Handguns Questionnaire was usually filled in by the Chief/Unit Head in Townships and smaller City departments, and by an Armorer or Ballistician in the States and Fifty Largest Cities. In Cities (50+), the primary respondents were not concentrated into any single category.

Table i. Rank of Primary Respondent for Handguns Questionnaire,
by Department Type.*

RANK/TITLE:	DEPARTMENT TYPE:					
	<u>% City</u> <u>1-9</u>	<u>% City</u> <u>10-49</u>	<u>% City</u> <u>50+</u>	<u>% 50</u> <u>Largest</u>	<u>% State</u>	<u>% Township</u>
Chief	74	45	13	4	0	67
Gun Specialist	1	6	22	54	34	0
Lieutenant	4	13	15	13	11	0
Sergeant	7	11	9	9	13	15

* Excluding Counties

Questionnaires from Counties were most often filled in by the Sheriff (49%) or Deputy Sheriff (16%).

NUMBER OF YEARS OF LAW ENFORCEMENT EXPERIENCE OF RESPONDENT

Table ii. Number of Years of Law Enforcement Experience of Respondents
to the Handguns DQ, by Department Type.

DEPARTMENT TYPE:	NUMBER OF YEARS OF EXPERIENCE:			
	<u>More Than</u> <u>5 Years</u>	<u>More Than</u> <u>10 Years</u>	<u>More Than</u> <u>20 Years</u>	<u>More Than</u> <u>25 Years</u>
State	97	86	39	26
City (50+)	93	74	39	19
50 Largest	92	88	40	20
City (10-49)	90	71	24	11
Township	86	53	23	19
City (1-9)	83	52	15	9
County	73	43	13	5
All Departments	88	66	26	14

In general, the questionnaire was filled in by experienced officers. Although about two thirds of the respondents had More Than 10 Years of law enforcement experience, there were variations among Department Types: More than 85% of respondents in the Fifty Largest Cities and States had More Than 10 Years of experience, while half or less of the respondents in Townships, Cities (1-9), and Counties had this much experience.

2.2.2 On Duty Use of Handguns

1. How many of the officers in your department use on duty, handguns of each of the following calibers? (Either as their primary or their "back-up" weapon.)

Number of Officers

Calibers

.32 Automatic

.38 Special

9mm Luger

.357 Magnum

.45 Automatic

Other (Specify) _____

Both the percentages of departments in each Department Type reporting use of each caliber of handgun on duty, and the percentages of all officers in each Department Type using each caliber of handgun on duty were determined. Comparisons of these measures showed some striking contrasts. For example, while 95% of the responding County departments said that some of their officers were using some .38 handguns, only 55% of all responding County officers were using .38s. Similarly, while 15% of the Fifty Largest Cities reported using .45 caliber handguns, only 2% of the officers in that Department Type were reported to be using .45s.

Table 1-1. Percentages* of Departments Having At Least One Officer Using a Handgun of the Specified Caliber; and Percentages of All Officers in a Particular Department Type Using Handguns of These Calibers On Duty.

DEPARTMENT TYPE:	CALIBER:							
	.38		.357 Magnum		.45		9mm	
	%Officers	%Depts	%Officers	%Depts	%Officers	%Depts	%Officers	%Depts
50 Largest	88	100	9	41	2	15	1	13
City (50+)	81	97	16	53	1	14	2	22
City (1-9)	70	93	23	51	2	8	3	5
City (10-49)	68	94	26	57	2	12	2	15
State	59	87	36	66	**	6	4	15
Township	56	85	36	74	1	7	4	26
County	55	95	40	59	1	11	3	10
All Depts.	80	94	17	56	1	10	1	14

* Percentages add to more than 100%.

** Less than 1%.

Almost all responding departments (94%) had some officers using the .38 caliber handgun on duty, and 80% of the officers in the responding departments were using .38s on duty. Although slightly more than half of the responding departments (56%) reported having some officers using the .357 Magnum, this gun was used by only 17% of their officers.

State police, Townships, and Counties reported relatively fewer officers using the .38 caliber handgun (55%-59% of officers) and relatively more officers using the .357 (36%-40% of officers) than did City Department Types.

The .45 and the 9mm were each being used by only 1% of officers in the responding departments, and by no more than 4% of the officers in any Department Type.

In answer to question 1, the 445 responding departments reported a total of 179,891 officers carrying handguns on duty. Four-fifths of those officers were carrying .38 caliber handguns, 17% were carrying .357s, 1% were carrying .45s, 1% were carrying 9mm handguns, and less than 1% were carrying handguns of any other caliber.

Table 1-2. Numbers of Officers in Responding Departments Carrying .38, .357, .45, 9mm, and Other Calibers of Handguns On Duty, by Department Type.

DEPARTMENT TYPE:	CALIBERS:				
	<u>.38</u>	<u>.357</u>	<u>.45</u>	<u>9mm</u>	<u>Other</u>
50 Largest	106,540	11,111	2,365	250	513
State	25,451	15,288	84	1,785	183
City (50+)	8,409	1,620	125	171	112
County	1,639	1,194	30	82	15
City (10-49)	1,293	498	42	40	23
City (1-9)	534	176	26	17	9
Township	149	97	2	11	7
All Depts.	144,015	29,984	2,674	2,356	862
% TOTAL	80%	17%	1%	1%	<1%

It is probable that the relative proportions of .38s and .357s reported in Question 1 (80% and 17%, respectively) were partially attributable to the sample design: All States and all of the Fifty Largest Cities were included in the sample, but only portions of the other five Department Types were sampled.

Using these reported numbers, divided by the numbers of respondents, Department Type averages, per caliber, were computed. These averages were multiplied by the number of departments in each Department Type in the population* to produce the estimates of the total number of handguns of each caliber in use shown in Table 1-3.

According to the estimates in Table 1-3, .38 caliber handguns represented about 70% of the total on duty handguns while .357s represented about 25% of the total. This moderate shift in the relative proportions of .38s and .357s was mainly a result of the extrapolation of data from County

* See Table 1.2-2, p.4.

departments: County departments reported 55% of their officers carrying .38s and 40% carrying .357s, and Counties make up almost one-fourth of the U.S. police department population.

Table 1-3. Estimated Numbers of Officers Carrying Various Calibers of Handguns in U.S. Police Departments On Duty, by Department Type.

DEPARTMENT TYPE:	CALIBER:				
	Estimated Number of .38s	Estimated Number of .357s	Estimated Number of .45s	Estimated Number of 9mm	Estimated Number of Other
50 Largest	115,804	12,077	2,571	272	558
State	27,075	16,264	89	1,899	195
City (50+)	58,969	11,360	877	1,199	785
County	70,432	51,309	1,289	3,524	645
City (10-49)	28,838	11,107	937	892	513
City (1-9)	34,875	11,494	1,698	1,110	588
Township	8,686	5,655	117	641	408
All Depts.	344,679	119,266	7,578	9,537	3,692
% TOTAL	71%	25%	1%	2%	1%
ESTIMATED TOTAL NUMBER IN U.S. = 484,752					

2.2.3 Characteristics of Handguns Used On Duty

Respondents were asked a series of questions about the handgun that was used on duty by more of their officers than any other (Most Used Handgun, Questions 2-2E), and then these same questions were asked about the handgun used on duty by the second greatest number of officers (Second Most Used Handgun, Questions 3-3E). The questions were asked in this way so that the data could always be referenced to a particular caliber of handgun.

Fifty-eight percent of the responding departments were using more than one caliber of handgun on duty. The Fifty Largest City departments had the smallest percentage of departments (48%) using more than one caliber of handgun on duty and Townships had the highest percentage (70%).

Table 2A/3A-1. Percentages of Departments With Officers Using More Than One Caliber of Handgun On Duty, by Department Type.

DEPARTMENT TYPE:	<u>% Responding Departments</u>
Township	70
State	64
City (50+)	62
County	60
City (10-49)	58
City (1-9)	51
50 Largest	48
All Departments	58

2. and 3. Select from the list in Question 1 the handgun that is "used, on duty, by more of your officers than any other."/
"second most often used by your officers." COMPLETELY
FILL IN THE QUESTIONS BELOW FOR THAT HANDGUN.*

2A. & 3A. Caliber Type.

2B. & 3B. How many are revolvers?
How many are automatics?

2C. & 3C. List below each different model of this "most used"/"second most used" handgun now used in your department. (IDENTIFY EACH DIFFERENT MODEL BY BOTH MANUFACTURER AND MODEL NAME OR MODEL NUMBER.)

2D. & 3D. Barrel Lengths:
How many have barrels of less than 3 inches?
How many have barrels of 3-5 inches?
How many have barrels of more than 5 inches?

2E. & 3E. Ammunition: In the table below, list each type of ammunition that your officers use with this "most used"/"second most used" handgun. (FILL IN THE TABLE BELOW FOR EACH TYPE OF AMMUNITION USED)

Bullet Type
Bullet Weight (in grains)
Manufacturer

*SEE APPENDIX A, pp. A-3 to A-5, FOR ACTUAL QUESTION PRESENTATION.

2.2.3.1 Caliber

2A. & 3A. Caliber Type.

(FOR MOST USED AND SECOND MOST USED HANDGUN)

Ninety-nine percent of the handguns* reported in Questions 2 and 3 were either .38 caliber (82%) or .357 caliber (17%). Only eight of the 445 departments (2%) said that a caliber other than .38 or .357 was used by more of their officers than any other; four cited the 9mm as Most Used and four cited the .45 caliber as Most Used.

Table 2A/3A-2. Percentages of Handguns Cited as Most Used or Second Most Used, by Caliber.

CALIBER:	<u>% Handguns Reported</u> <u>in Qs. 2 and 3</u> (n = 180,256)
.38	82
.357	17
9mm	1
.45	1
.22	**
.32	**
.44	**
.25	**

** Less than 1%

Given these findings, it is not surprising that when the .38 caliber was listed as Most Used Handgun, the .357 was the most likely caliber to be listed as the Second Most Used Handgun, and vice versa. States reported the highest percentage of departments in which the .357 was used by more officers

* The total numbers of handguns reported in Qs. 2 and 3 were slightly greater than the numbers of officers carrying handguns reported in Q. 1 (180,256 and 179,891, respectively). In addition, there were a few "Third," "Fourth," etc., "Most Used Handguns" that should not have been reported in Qs. 2 and 3. Both of these errors combined, however, represented less than 1% of all the handguns in the responding departments.

than any other caliber; 45% of States said the .357 was Most Used. The Fifty Largest Cities reported the highest percentage of departments in which the .38 was used by more officers than any other caliber; 89% of the Fifty Largest Cities said the .38 was Most Used.

Table 2A/3A-3. Caliber of "Most Used" and "Second Most Used" Handgun, by Department Type.

DEPARTMENT TYPE:	MOST USED HANDGUN IN DEPARTMENT:		SECOND MOST USED HANDGUN IN DEPARTMENT:	
	<u>.38 Caliber</u>	<u>.357 Caliber</u>	<u>.38 Caliber</u>	<u>.357 Caliber</u>
	<u>% Depts.</u> (n = 445)	<u>% Depts.</u> (n = 445)	<u>% Depts.</u> (n = 259)	<u>% Depts.</u> (n = 259)
50 Largest	89	11	23	64
City (50+)	80	19	29	51
City (1-9)	76	20	33	53
County	74	25	32	57
City (10-49)	71	27	38	50
Township	67	33	21	47
State	53	45	53	33
All Departments	74	24	34	51

* Most Used Handgun percentages were based on all respondents. Second Most Used Handgun percentages were based on the 259 respondents listing a second handgun.

Half of the reporting 328 departments in which there were more .38s in use on duty than any other caliber were using the .38 exclusively for on duty service (reported no Second Most Used Handgun). Only 17% of the departments in which the .357 was reported as the Most Used on duty gun were using the .357 exclusively.

Table 2A/3A-4. Of Those Departments Citing the .38 and the .357 as Their Most Used Handguns, the Percentages Listing .38/.357, Another Caliber, or No Second Most Used Handgun.

OF DEPARTMENTS WHOSE
MOST USED HANDGUN WAS:

THEIR SECOND MOST USED
HANDGUN WAS:

	<u>% .38</u>	<u>% .357</u>	<u>% Other</u>	<u>% Using Most Used Handgun Exclusively</u>
.38 (n = 328)	--	40	10	50
.357 (n = 109)	77	--	7	17
All Calibers (n = 445)	19	30	9	42

* * * * *

* The remainder of the discussion of Questions 2-2E and 3-3E *

* will focus on the data for Most Used Handgun (Qs. 2-2E), since *

* these data represent over 90% of the handguns reported. Only *

* in cases in which differences appear will the data for Second *

* Most Used Handgun (Qs. 3-3E) be discussed, even though data for *

* Second Most Used Handguns will be presented in the text tables. *

* Full tables for all questions appear in Appendix B. *

* * * * *

2.2.3.2 Revolvers Automatics

2B. and 3B. How many are revolvers?
How many are automatics?

(FOR MOST USED AND SECOND MOST USED HANDGUN)

Since the vast majority of reported handguns were either .38 caliber or .357 caliber, it follows that almost all (99%) of the reported handguns were revolvers (only eleven .38 caliber automatics were reported, and no .357 caliber automatics were reported). Within every Department Type, 95% or more of the Most Used Handguns were revolvers. For those Most Used Handguns which

were automatics, only 9mm, .45, and .38 were cited. For Second Most Used, .32, .22, and .25 automatics were also cited.

Table. 2B/3B. Percentages of MOST USED HANDGUNS and SECOND MOST USED HANDGUNS Which Were Revolvers, by Department Type.

DEPARTMENT TYPE:	MOST USED HANDGUNS:		SECOND MOST USED HANDGUNS:	
	<u>Total No. Reported</u>	<u>% Revolver</u>	<u>Total No. Reported</u>	<u>% Revolver</u>
50 Largest	111,928	100	7,398	100
State	38,618	96	6,087	98
City (50+)	9,346	99	1,168	94
County	2,338	100	523	99
City (10-49)	1,532	98	307	93
City (1-9)	563	95	142	92
Township	213	100	43	77
All Depts.	164,588	99	15,668	98

2.2.3.3 Model/Manufacturer

2C and 3C. List below each different model of this "most used"/ "second most used" handgun now used in your department. (IDENTIFY EACH DIFFERENT MODEL BY BOTH MANUFACTURER AND MODEL NAME OR MODEL NUMBER.)

MANUFACTURER

MODEL/MODEL NUMBER

(etc.)

Almost all of the "Most Used Handguns" reported by the responding departments were produced by only two manufacturers. Although it was not possible to determine what percentages of handguns in use were made by various manufacturers, the data show that 97% of the departments listed one or both of two manufacturers, and did not list any other manufacturer

for their Most Used Handgun. At least 92% of the departments in every Department Type were using those two manufacturers exclusively for their Most Used Handguns.

Table 2C-1. Percentages of Responding Departments Using Handguns of Specified Manufacturers as Their Most Used Caliber Handgun, by Department Type.

MANUFACTURER	DEPARTMENT TYPE:							
	<u>%All</u> <u>Depts.</u>	<u>% 50</u> <u>Largest</u>	<u>%</u> <u>State</u>	<u>%City</u> <u>50+</u>	<u>%City</u> <u>10-49</u>	<u>%City</u> <u>1-9</u>	<u>%</u> <u>County</u>	<u>%</u> <u>Township</u>
2	91	100	96	95	88	88	85	88
1	50	57	45	61	49	50	47	56
Other	3	0	2	1	8	1	5	4

A great number of different models were represented among departments' Most Used Handguns. About two-fifths of all responding departments and 67% of the Fifty Largest Cities had some of one model made by Manufacturer 2 represented among their Most Used guns. The four models with the highest percentages of departmental representation were all made by one manufacturer. The .357 model with greatest representation was also made by this manufacturer.

2D. and 3D. Barrel Lengths:

How many have barrels of less than 3 inches?

How many have barrels of 3-5 inches?

How many have barrels of more than 5 inches?

(FOR MOST USED AND SECOND MOST USED HANDGUN)

Overall, 80% of the 180,256 handguns reported in Questions 2D and 3D (data for Most Used and Second Most Used combined) had barrels of 7.6-12.7 cm (3-5 in.), 10% were less than 7.6 cm (3 in.), and 10% more than 12.7 cm (5 in.). Within the seven Department Types, about the same proportion of handguns had 7.6-12.7 cm barrels, with one exception: a smaller proportion

of the handguns reported by State departments (61%) had barrels 7.6-12.7 cm long, and States reported a much higher percentage (29%) of handguns with barrels more than 12.7 cm long.

Table 2D/3D-1. Percentages of Most Used and Second Most Used Handguns With Barrels of Various Lengths, by Department Type.

DEPARTMENT TYPE:	BARREL LENGTH:		
	% Handguns 7.6-12.7 cm	% Handguns Less Than 7.6 cm	% Handguns More Than 12.7 cm
50 Largest (n=119,326)	87	9	4
City 1-9 (n=755)	86	9	5
City 10-49 (n=1839)	82	10	8
Township (n=256)	78	16	5
City 50+ (n=10,514)	77	17	5
County (n=2816)	77	17	5
State (n=44,705)	61	10	29
All Depts. (n=180,256)	80	10	10

Data from Question 2D (Most Used Handgun, n = 164,598, 91% of total) showed differences in barrel lengths among the various calibers of handguns. The proportions of .38 caliber handguns of each length closely parallel the proportions of all handguns taken together. In contrast, 100% of the 9mm handguns reported had 7.6-12.7 cm barrels, 91% of the .45s had barrels of this length, and 89% of the .357s had barrels of this length.

Table 2D. Percentages of Most Used Caliber Handguns of Various Calibers With Barrels of Specified Length. (164,588 Handguns, Q. 2A.)

REPORTED BARREL LENGTH:	CALIBER OF HANDGUN:			
	% .38 (n=144,104)	% .357 (n=18,652)	% 9mm (n=1788)	% .45 (n=44)
Less Than 3 Inches (7.6 cm)	10	2	0	0
3-5 Inches (7.6-12.7 cm)	80	89	100	91
More Than 5 Inches (12.7 cm)	10	9	0	9

Two calibers of handguns with greatest representation (.38 and .357) were examined in greater detail. Table 2A/3A-4 (p. 11) showed that, in general, one of these two calibers would be used by more officers in a department than any other caliber, and that the other would be used by the next greatest number of officers. Of the .38s that were listed as Most Used Handguns, 80% had barrels of 7.6-12.7 cm. Of the .38s that were listed as Second Most Used Handguns, more than half (53%) had barrels of less than 7.6 cm. Roughly these same proportions were found in all Department Types except States (Most Used .38s) and Cities with 1-9 Officers (Second Most Used .38s). For exact numbers, see Appendix B.

Of the .357 handguns cited as Most Used, 89% had barrels of medium length. Approximately this same percentage was found in six of the seven Department Types for the .357s that were listed as Second Most Used Handguns. However, the overall percentages for Second Most Used .357s were greatly affected by State departments: 64% of the .357 Second Most Used Handguns in States had barrels of more than 12.7 cm.

Table 2D/3D-2. Percentages of .38 and .357 Caliber Handguns With Barrels of Each Specified Length, When They Were Most Used and Second Most Used Handguns.

REPORTED BARREL LENGTH:	CALIBER:			
	.38		.357	
	Most Used (n=144,104)	Second Most (n = 3943)	Most Used (n=18,652)	Second Most (n = 11,381)
Less Than 3 Inches (7.6 cm)	10	53	2	2
3-5 Inches (7.6-2.7 cm)	80	45	89	73
More Than 5 Inches (12.7 cm)	10	2	9	26

2.2.4 Characteristics of Ammunition Used

2E. and 3E. Ammunition: In the table below, list each type of ammunition that your officers use with this "most used"/"second most used" handgun. (FILL IN THE TABLE BELOW FOR EACH TYPE OF AMMUNITION USED)

<u>BULLET TYPE</u>	<u>BULLET WEIGHT</u> (IN GRAINS)	<u>MANUFACTURER</u>
--------------------	-------------------------------------	---------------------

(FOR MOST USED AND SECOND MOST USED HANDGUN)

2.2.4.1 Bullet Type

Almost half (49%) of the responding departments were using Lead bullets in their Most Used Handguns. About one-fourth were using Hollow-point, and 15% were using Jacketed ammunition.

Table 2E/3E-1. Percentages* of Departments Using Each Specified Bullet Type in Their Most Used and Second Most Used Handgun.

BULLET TYPE:	MOST USED HANDGUN:	SECOND MOST USED:
	<u>% Depts.</u> (n = 445)	<u>% Depts.</u> (n = 259)
Lead	49	43
Hollowpoint	24	27
Jacketed	15	15
Soft Point	10	11
Wadcutter	6	3
Semi Wadcutter	3	2
Metal Piercing	2	**
Unusable Information	16	14
No Answer	1	2

* Percentages add to more than 100% since multiple answers were allowed.

** Less than 1%.

About two-thirds of the respondents reported using bullets of only one type in their Most Used Handgun. About half of these departments said they used Lead bullets exclusively. Thirteen percent reported using Hollowpoint exclusively.

Table 2E/3E-2. * Of the Departments Using Only One Type of Bullet for Their Most Used and Second Most Used Handguns, Percentages Using Specified Bullet Type.

BULLET TYPE:	MOST USED HANDGUN:	SECOND MOST USED:
	<u>% Depts.</u> (n = 292)	<u>% Depts.</u> (n = 138)
Lead	49	41
Hollowpoint	13	18
Soft Point	6	5
Jacketed	4	4
Ball	4	2
Lubaloy	3	4
Wadcutter	2	1
Semi Wadcutter	1	1
Metal Piercing	1	4
Frangible	0	1
Other	1	4
Unusable Information	14	12

2.2.4.2 Bullet Weight

About three-fourths of the responding departments reported using ammunition with bullet weights of 151-160 grains (978.5 mg - 1036.8 mg), and very few departments were using ammunition with bullet weights higher than this. About 17% were using ammunition with bullet weights of 654.5 mg - 712 mg (101-110 grains), and 12% with weights of 913.7 mg - 972.0 mg (141-150 grains).

* This table was compiled by special tabulation and does not appear in Appendix B.

Table 2E/3E-3. Percentages* of Departments Using Ammunition
for Their Most Used and Second Most Used Handguns With
Specified Bullet Weights.

REPORTED BULLET WEIGHT IN GRAINS:	MOST USED HANDGUN:	SECOND MOST USED:
	<u>% Depts.</u> (n = 445)	<u>% Depts.</u> (n = 259)
151-160 (978.5 - 1036.8 mg)	73	57
101-110 (654.5 - 712.8 mg)	17	17
141-150 (913.7 - 972.0 mg)	12	10
121-130 (784.1 - 842.4 mg)	7	9
191-200 (1237.2 - 1296.0 mg)	6	5
**		

* Percentages add to more than 100% since multiple answers were allowed.
** Percentages of departments in all other categories were 5% or less.

2.2.4.3 Ammunition Manufacturer

About half of the 445 responding departments (53%) were using at least some ammunition made by Manufacturer 8 with their Most Used Handgun. About a third (34%) were using ammunition by Manufacturer 16, 17% were using ammunition of Manufacturer 12.

Table 2E/3E-4. Percentages* of Departments Using Ammunition Made by Each Specified Manufacturer with Their Most Used and Second Most Used Handgun.

MANUFACTURER NO:	MOST USED HANDGUN:	SECOND MOST USED:
	<u>% Depts.</u> (n = 445)	<u>% Depts.</u> (n = 259)
8	53	49
16	34	31
12	17	20
10	11	7
**		

* Percentages add to more than 100% since multiple answers were allowed.
** Percentages of departments using each other brand were 5% or less.

More than half (n=263, 59%) of the responding departments reported using only one brand of ammunition with their Most Used Handguns. Fifty percent of these departments said they were using that of Manufacturer 8 exclusively. About one-fourth (22%) reported using Manufacturer 16 exclusively. Less than 10% were using any other brand exclusively.

Of the 109 departments (42% of the 259 reporting a second handgun) reporting use of only one manufacturer's ammunition for their Second Most Used Handgun, 42% reported using the product of Manufacturer 8, 26% of Manufacturer 16, and 14% of Manufacturer 12.

Table 2E/3E-5. Of the Departments Using Only One Brand of Ammunition with Their Most Used and Second Most Used Handgun, Percentages Using Each Specified Brand of Ammunition.

MANUFACTURER NO:	MOST USED HANDGUN:	SECOND MOST USED:
	<u>% Depts.</u> (n = 263)	<u>% Depts.</u> (n = 109)
8	50	42
16	22	26
10	9	4
12	9	14
*		

* Percentages of departments using each other brand were less than 10%.

2.2.5 Off Duty Use of Handguns

4. How about off duty: About how many of the officers in your department use handguns of each of the following calibers when they are off duty?

NUMBER OF OFFICERS

CALIBER

_____	.22 LR
_____	.25 Automatic
_____	.32 Automatic
_____	.38 Special
_____	9 mm Luger
_____	.357 Magnum
_____	.45 Automatic
_____	Other (Specify) _____
_____	Other (Specify) _____

Only 78% of the 445 departments which provided data about their officers' use of handguns on duty (Q. 1) answered this question. Their answers accounted for 62% of the 179,091 "officers carrying handguns on duty" reported in Q. 1.

Some of the 100 departments which did not report off duty use of handguns made such comments as "Off duty officers use weapons of their choice.", and "No off duty officers." Therefore, these data cannot be taken as a measure of proportion of officers that carry weapons off duty. The data can be used, however, to indicate the proportions of various calibers of handguns used off duty as compared with those used on duty.

About one-fourth of the departments not reporting off duty weapons were State departments: 51% of the States gave "No Answer". About 75% or more of the departments in all other Department Types did answer Question 4.

Table 4. Percentages of Departments in Each Department Type Which Did Not Report Officers' Use of Handguns Off Duty.

DEPARTMENT TYPE:	% Departments <u>"None"/"No Answer"</u>
State	51
City (1-9)	26
50 Largest	22
Township	22
City (50+)	18
City (10-49)	15
County	15
All Departments	22

The 345 departments which reported off duty handgun use were using .38 caliber handguns in about the same proportion as was reported for on duty use in Q. 1: 94% of all responding departments had at least one officer using the .38 on duty, and 96% of the 345 departments describing off duty handguns had at least one .38 in use off duty. In addition, about the same proportions of officers were using the .38 on duty and off duty: 80% and 86%, respectively.

There was one major difference between on duty and off duty handgun use: Only four different calibers of handguns were reported to be in use on duty by 10% or more of the responding departments; but eight different calibers were reported to be in use off duty by 10% or more of the departments that reported off duty use. As with on duty use, however, the percentages of officers using each of these different calibers was small; the majority of officers used the .38 on duty and off duty.

Table 4/1. Percentages of Officers and Percentages of Departments*
Using Specified Calibers of Handguns On Duty and Off Duty.

CALIBER:	DEPARTMENTS:		OFFICERS:	
	% Depts.	% Depts.	% Officers	% Officers
	<u>On Duty</u> (n = 445)	<u>Off Duty</u> (n = 345)	<u>On Duty</u> (n = 179,891)	<u>Off Duty</u> (n = 110,534)
.38	94	96	80	86
.357	56	29	17	6
9 mm	14	30	1	4
.45 Auto.	10	21	1	2
.32 Auto.	3	22	**	1
.25 Auto.	3	23	**	1
.22	3	15	**	1
.44	2	1	**	**
.380	2	10	**	**
.41	2	**	**	**
.32 Revolver	1	1	**	**
.45 Revolver	0	1	0	**
Other	**	**	**	**

* Percentages of departments add to more than 100% since there could be more than one caliber of handgun in each department.

** Less than 1%.

2.2.6 Problems With Handguns

5. When you think of all the handguns that have been used by any of your officers in the last 5 years; which of these guns have had, or have caused problems of one kind or another?

Be sure to think of handguns that were once used but are not now used, as well as handguns that are now used. IN THE SPACES PROVIDED BELOW TELL US ABOUT THE HANDGUN AND THE "PROBLEM".

CASE NUMBER 1

Caliber

Revolver or Automatic

Manufacturer

Model

Barrel Length

What was the problem?

CASE NUMBER 2

(etc.)

CASE NUMBER 3

(etc.)

More than half (55%) of the responding departments either said they had had "no problems" with their handguns in the last 5 years or left the question blank. There were striking differences among the seven Department Types, however: Almost three-fourths of the States and Fifty Largest Cities cited one or more problems, but only about one-fourth of the Counties and Cities (1-9) described problems.

Table 5-1. Percentages of Departments in Each Department Type
Listing at Least One Handgun Problem.

DEPARTMENT TYPE:	<u>% Dept. Types Citing One or More Problems</u>
State	72
50 Largest	72
City (50+)	53
City (10-49)	47
Township	41
County	29
City (1-9)	24
All Departments	45

Among the 203 departments that described at least one problem, those problems associated with the Cylinder were mentioned most frequently (35%). The Hammer/Firing Pin was reported to have been involved in the handgun problems of about one-fifth of the departments mentioning problems.

Table 5-2. Of the 203 Departments Which Listed at Least One Problem,
Percentages Citing Specified Problem.

PROBLEM:	% Departments* (n = 203)
Cylinder	35
Hammer/firing pin	21
Misfires	15
Trigger	11
Age, wear and tear	11
Abuse by personnel	10
Accidental discharge	10
Main springs	9
Problems on double or single action	9
Ammunition problems	8
Problems with Finish (Bluing)	8
Jamming	8
Shaving Lead	8
Timing Problems	8
Problems with Reliability/Defective Manufacturing	7
Head Space Problems	6
Barrel Problems	5
Ejector Rod Problems	4
Feeding Problems	4
Other	24

* Percentages add to more than 100% since departments could describe more than one problem.

Each of the problem descriptions, categorized by manufacturer, was recorded verbatim along with the caliber, manufacturer/model, barrel length, and type of handgun. No cross tabulations were made with these identifying factors, however, because the various calibers, manufacturers, etc., were disproportionately represented among the departments. Cross tabulations with these identifiers would have reflected this departmental representation rather than problems associated with a particular model, caliber, barrel length, etc.

Examples of Cylinder Problems Mentioned Were:

"Shaved lead, cylinder had excess play."

"Cylinder would not rotate when hammer was cocked."

Weapon bought new and used approximately 3 months."

"After carrying this gun in a holster for several years, the rotating mechanism wears so much that the bullets do not line up with the barrel, causing a spray of lead to fly out the side of the chamber."

Examples of Hammer/Firing Pin Problems Mentioned Were:

"Crystallized hammers, weak main spring, crystallized firing pin."

"Firing pin spring too weak."

"Hammer springs of marginal strength and would not fire primers at all times."

2.2.7 Problems Associated With Handgun Ammunition

6. How about handgun ammunition: Have your officers found any problems with any handgun ammunition that they have used in the last 5 years?

Again, be sure to think of handgun ammunition that was once used but is not now used, as well as ammunition that is now used. IN THE SPACES BELOW TELL US ABOUT THE AMMUNITION AND THE "PROBLEM".

CASE NUMBER 1

Caliber

Cartridge

Bullet Type

Bullet Weight

Manufacturer

What was the problem?

CASE NUMBER 2

(etc.)

CASE NUMBER 3

(etc.)

A smaller percentage of the responding departments reported problems with handgun ammunition (26%) than reported problems with handguns (45%). A much higher percentage of the Fifty Largest Cities (61%) reported ammunition

problems than any other Department Type. None of the 27 Township departments and only 7 of the 84 City (1-9) departments listed an ammunition problem.

Table 6-1. Percentages of Departments in Each Department Type Reporting at Least One Problem With Handgun Ammunition.

DEPARTMENT TYPE:	<u>% Dept. Type</u>
50 Largest	61
State	45
City (50+)	43
County	18
City (10-49)	16
City (1-9)	8
Township	0
All Departments	26

Among the 117 departments that described an ammunition problem, three problems were cited by more than one-fourth of the departments: Power/Penetration Too Low (30%); Knockdown Power Insufficient (27%); and Primer (25%). A wide variety of other problems was also mentioned.

Table 6-2. Of the 117 Departments Citing at Least One Problem with Handgun Ammunition, Percentages* Citing Each Specified Problem.

PROBLEM:	<u>% Departments</u> (n = 117)
Power/penetration too low	30
Knockdown power insufficient	27
Primer	25
Case, Cartridge	21
Wrong amount of powder	17
Gun failure	15
Penetration too great	9
Accuracy poor	5
Leading, Fouling	5
Richochet	5
Smoking excessive	3
Variability of energy rates	3
Powder/Misc. problems	3
Other	14

* Percentages add to more than 100% since multiple answers were allowed.

A cross tabulation was performed for those departments which said they used reloaded ammunition for either their Most Used or their Second Most Used Handgun (Qs. 2E and 3E). Of these 52 departments, 56% cited ammunition problems as compared to 26% of all the responding departments. (It is likely that more departments were using reloaded ammunition than reported that fact in either Q. 2E or Q. 3E.)

As with handgun problems, each ammunition problem was recorded verbatim along with the identifiers listed in Question 6. Again, the disproportionate representation of certain calibers, cartridge types, manufacturers, etc., precluded cross tabulation of these identifiers.

Examples of Power/Penetration Too Low Were:

"Lack of penetration."

"Would not penetrate windshields; as a result an officer was almost run over by a felon."

"Lack of penetration on autos and ricocheting."

Examples of Knockdown Power Insufficient Were:

"Poor stopping power."

"Bullet would go through person but would not stop or immediately disable them."

"The street officers frequently complain that this bullet fails to have adequate "knock-down" power desirable in a face to face shoot out. Penetration is great, but cavitation is poor on this type bullet."

Examples of Primer Problems Were:

"Dead primer, unknown cause of defect."

"Arrived from the manufacturer with blown primers."

"Bad primers."

APPENDIX A

NBS-886
May 1972

OMB 41-F72030
Approval Expires June 30, 1973

U.S. Department of Commerce
National Bureau of Standards

DETAILED QUESTIONNAIRE: HANDGUNS AND
HANDGUN AMMUNITION

POLICE EQUIPMENT SURVEY

Sponsored By:

National Institute of Law Enforcement and Criminal Justice
Law Enforcement Assistance Administration
U.S. Department of Justice

Directed and Conducted By:

Behavioral Sciences Group
National Bureau of Standards
Washington, D.C. 20234
Phone: 301-921-3558

INTRODUCTION: Police officers in several departments have told us informally about their problems in selecting and using handguns. They have told of the danger to their officers from poor handguns and handgun ammunition. In order to make it easier for law enforcement departments to select and buy handguns and handgun ammunition to meet their particular needs, the Law Enforcement Standards Laboratory will be writing voluntary performance standards for these items of equipment.

PURPOSE OF THIS QUESTIONNAIRE: The purpose of this "detailed" questionnaire is to get answers from YOU, the user, about the handguns and handgun ammunition you are now using, and the problems you find in using them. Your answers will be used to determine what kinds of testing need to be done, and what sorts of problems must be solved. We must find out what YOUR needs are.

GENERAL INSTRUCTIONS:

1. Fill in the questionnaire completely. Even if you do not have all the information you need "at your fingertips," please make your best effort to supply every answer AS ACCURATELY AS POSSIBLE.
2. Answer all questions for YOUR OWN DEPARTMENT. Do not attempt to supply information that might exist in some other department.
3. The results of this questionnaire will be compiled by computer. It is very important that you follow directions and answer every question legibly and in the boxes and spaces provided.
4. No individual department will be identified in the report of this survey; the results will be published in tabulated form.
5. Additional instructions for filling in your answers appear after some questions. Follow the directions given.
6. Please PRINT all answers and comments CLEARLY.
7. When this questionnaire has been completely filled in; place it, with the other questionnaires sent to your department, in the stamped, addressed envelope supplied. Return all of them to:
Technology Building, Room A110
National Bureau of Standards
Washington, D.C. 20234
8. If you have any questions, write to the above address or call collect:
E. Bunten, or P. Klaus
Phone: 301-921-3558
9. Remember that it is only by getting YOUR answers to these questions that it will be possible to begin solving the problems that police have with handguns and handgun ammunition.

PART I: ON DUTY USE OF HANDGUNS AND HANDGUN AMMUNITION.

1. How many of the officers in your department use, on duty, handguns of each of the following calibers? (Either as their primary or their "back-up" weapon.)

	<u>NUMBER OF OFFICERS</u>	<u>CALIBER</u>
(10-14) ***	_____	.32 Automatic
(15-19)	_____	.38 Special
(20-24)	_____	9 mm Luger
(25-29)	_____	.357 Magnum
(30-34)	_____	.45 Automatic
(35-39)	_____	Other (Specify) _____
	_____	Other (Specify) _____

2. Select from the list in Question 1 the handgun that is used, on duty, by more of your officers than any other. COMPLETELY FILL IN THE QUESTIONS BELOW FOR THAT HANDGUN.

MOST USED HANDGUN

(40-42) 2A. Caliber Type. _____

(43-47) 2B. How many are revolvers? _____

(48-52) How many are automatics? _____

- 2C. List below each different model of this "most used" handgun now used in your department. (IDENTIFY EACH DIFFERENT MODEL BY BOTH MANUFACTURER AND MODEL NAME OR MODEL NUMBER)

	<u>MANUFACTURER</u>	<u>MODEL/MODEL NUMBER</u>
(53-56)	a. _____	_____
(57-60)	b. _____	_____
(61-64)	c. _____	_____
(65-68)	d. _____	_____
(69-72)	e. _____	_____
(73-76)	f. _____	_____
(77-80)	g. _____	_____
(10-13)		

*** Numbers in parentheses are for computer use only.

2D. Barrel Lengths:

(14-18) How many have barrels of less than 3 inches? _____

(19-23) How many have barrels of 3-5 inches? _____

(24-28) How many have barrels of more than 5 inches? _____

2E. Ammunition: In the table below, list each type of ammunition that your officers use with this "most used" handgun. (FILL IN THE TABLE BELOW FOR EACH TYPE OF AMMUNITION USED)

	<u>BULLET TYPE</u>	<u>BULLET WEIGHT</u> (IN GRAINS)	<u>MANUFACTURER</u>
(29-35)	_____	_____	_____
(36-42)	_____	_____	_____
(43-49)	_____	_____	_____
(50-56)	_____	_____	_____
(57-63)	_____	_____	_____
(64-70)	_____	_____	_____
(71-77)	_____	_____	_____
(78-14)	_____	_____	_____

3. Go back to the list in Question 1 and pick out the handgun that is second most often used by your officers. COMPLETELY FILL IN THE QUESTIONS BELOW FOR THAT HANDGUN.

SECOND MOST USED HANDGUN:

(15-17) 3A. Caliber Type: _____

(18-22) 3B. How many are revolvers? _____

(23-27) How many are automatics? _____

- 3C. List below each different model of this "second most used" handgun now used in your department. (IDENTIFY EACH DIFFERENT MODEL BY BOTH MANUFACTURER AND MODEL NAME OR MODEL NUMBER)

	<u>MANUFACTURER</u>	<u>MODEL/MODEL NUMBER</u>
(28-31)	a. _____	_____
(32-35)	b. _____	_____
(36-39)	c. _____	_____
(40-43)	d. _____	_____
(44-47)	e. _____	_____
(48-51)	f. _____	_____

3D. Barrel Lengths:

(52-56) How many have barrels of less than 3 inches? _____

(57-61) How many have barrels of 3-5 inches? _____

(62-66) How many have barrels of more than 5 inches? _____

- 3E. Ammunition: In the table below, list each type of ammunition that your officers use with this "second most used" handgun. (FILL IN THE TABLE BELOW FOR EACH TYPE OF AMMUNITION USED)

	<u>BULLET TYPE</u>	<u>BULLET WEIGHT</u> (IN GRAINS)	<u>MANUFACTURER</u>
(67-73)	_____	_____	_____
(74-80)	_____	_____	_____
(10-16)	_____	_____	_____
(17-23)	_____	_____	_____

PART II: OFF DUTY USE OF HANDGUNS.

4. How about off duty: about how many of the officers in your department use handguns of each of the following calibers when they are off duty?

	<u>NUMBER OF OFFICERS</u>	<u>CALIBER</u>
(24-28)	_____	.22 LR
(29-33)	_____	.25 Automatic
(34-38)	_____	.32 Automatic
(39-43)	_____	.38 Special
(44-48)	_____	9 mm Luger
(49-53)	_____	.357 Magnum
(54-58)	_____	.45 Automatic
(59-63)	_____	Other (Specify) _____

	_____	Other (Specify) _____

5. When you think of all the handguns that have been used by any of your officers in the last 5 years; which of these guns have had, or have caused problems of one kind or another?

(64)

(65-67) Caliber _____

(68) Revolver or Automatic

(69-70) Manufacturer

(71-72) Model _____

(73) Barrel Length

(74-75) What was the problem?

CASE NUMBER 2

(76-78) Caliber _____

(79) Revolver or Automatic _____

(10-11) Manufacturer _____

(12-13) Model _____

(14) Barrel Length _____

(15-16) What was the problem? _____

CASE NUMBER 3

(17-19) Caliber _____

(20) Revolver or Automatic _____

(21-22) Manufacturer _____

(23-24) Model _____

(25) Barrel Length _____

(26-27) What was the problem? _____

PART IV: PROBLEMS ASSOCIATED WITH HANDGUN AMMUNITION

6. How about handgun ammunition: Have your officers found any problems with any handgun ammunition that they have used in the last 5 years?

Again, be sure to think of handgun ammunition that was once used but is not now used, as well as ammunition that is now used. IN THE SPACES BELOW TELL US ABOUT THE AMMUNITION AND THE "PROBLEM".

(28)

CASE NUMBER 1

(29-31) Caliber _____

(32-33) Cartridge _____

(34-35) Bullet Type _____

(36-38) Bullet Weight _____

(39-40) Manufacturer _____

(41-42) What was the problem? _____

CASE NUMBER 2

(43-45) Caliber _____

(46-47) Cartridge _____

(48-49) Bullet Type _____

(50-52) Bullet Weight _____

(53-54) Manufacturer _____

(55-56) What was the problem? _____

CASE NUMBER 3

(57-59) Caliber _____

(60-61) Cartridge _____

(62-63) Bullet Type _____

(64-66) Bullet Weight _____

(67-68) Manufacturer _____

(69-70) What was the problem? _____

IDENTIFYING INFORMATION: (All identifying information will be kept
confidential)

Name of Department: _____

Address: _____

Name of person who answered this questionnaire:

Title: _____ Rank: _____

No. of years experience in law enforcement: _____

Telephone Number: _____

Others who helped: 1. _____

Name

Title: _____ Rank: _____

No. of years experience in law enforcement: _____

Telephone Number: _____

2. _____

Name

Title: _____ Rank: _____

No. of years experience in law enforcement: _____

Telephone Number: _____

NOTES

APPENDIX B

DATA TABLES

B.1 Advice to the Reader

- (a) The data presented in the following tables resulted from the responses of a stratified random sample (see Section 1.2) of police departments in response to a specific set of questions (see Appendix A). These data do not, in any way, reflect objective testing of any of the equipment by the National Bureau of Standards. The reader is cautioned to become familiar with the questionnaire and to evaluate the data in terms of the exact questions asked.
- (b) Tables have been numbered after the question number (e.g., the tables for Question 6A. would be numbered 6A-1, 6A-2, etc.). The data are usually presented by number of respondents and nearest whole percentage. Because of the statistical limitations imposed by the sample sizes used in this study, the reader is cautioned to be wary of assigning importance to percentage differences of less than 5% when percentages are based on all respondents, and to percentage differences of less than 10% when percentages are based on one of the sub-sample groups, (e.g., a particular Department Type or Region). No statistical tests of significance are reported.
- (c) These tables are based on the responding departments from the specific sample selected for this questionnaire. This sample was not proportional to the total population of police departments, and although it is possible to do so, the data in these tables have not been weighted to allow direct extrapolation to the total population.
- (d) In order to extrapolate to the total population from the respondent data presented in this report, use the following procedure: For each Department Type, multiply the percentage of respondents of a particular Department Type giving the answer of interest (See B.2 Data Tables, Appendix B) by the total number of departments of that Department Type in the population (See Table 1.2-2, Section 1.2); add those seven subtotals; and divide the total by the total number of police departments in the population (Table 1.2-2). The quotient of this division will be an estimate of the percentage of all U.S. police departments that would choose the answer of interest.

B.2 Data Tables

Table i-1

RANK OF PERSON WHO FILLED IN QUESTIONNAIRE

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	CITY (1-9 OFFICERS)	NO.	%	CITY (10-49 OFFICERS)	NO.	%	NO.	%	NO.	%
CHIEF	133	30	0	0	1	1	62	74	40	45	10	13	2	4	18	6
CAPTAIN	36	8	9	19	1	1	0	0	7	8	18	23	1	2	0	0
COMMISSIONER	2	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0
COLONEL	3	1	2	4	0	0	1	1	0	0	0	0	0	0	0	0
ACTING CHIEF	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0
ASSISTANT CHIEF	8	2	1	2	0	0	1	1	2	2	3	4	0	0	1	1
MAJOR	5	1	2	4	1	1	0	0	0	0	0	0	2	4	0	0
LIEUTENANT	41	9	5	11	3	4	3	4	12	13	12	15	6	13	0	0
CORPORAL	2	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1
DEPUTY SHERIFF	13	3	0	0	12	16	0	0	0	0	0	0	0	0	1	1
INSPECTOR	3	1	1	2	0	0	0	0	1	1	1	1	0	0	0	0
SHERIFF	36	8	0	0	36	49	0	0	0	0	0	0	0	0	0	0
SERGEANT	41	9	6	13	4	5	6	7	10	11	7	9	4	9	4	1
PATROLMAN	20	4	1	2	0	0	4	5	4	4	5	6	4	9	2	2
OTHER TITLE	22	5	4	9	1	1	4	5	6	7	5	6	2	4	0	0
UNDERSHERIFF	7	2	0	0	7	10	0	0	0	0	0	0	0	0	0	0
SPECIALIST	71	16	16	34	7	10	1	1	5	6	17	22	25	54	0	0
TOTAL	445	99	47	100	73	98	84	100	89	99	79	100	46	99	27	10

Table i-2

YEARS OF EXPERIENCE OF PERSON WHO FILLED IN QUESTIONNAIRE

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	CITY (1-9 OFFICERS)	NO.	%	CITY (10-49 OFFICERS)	NO.	%	NO.	%	NO.	%
2 OR LESS	11	2	0	0	4	5	6	7	0	0	0	0	1	2	0	0
3-5 YEARS	37	8	0	0	12	16	6	10	7	8	3	4	3	7	4	1
6-10 YEARS	96	22	5	11	22	30	26	31	17	19	15	19	2	4	9	3
11-15 YEARS	87	20	4	9	14	19	19	23	22	25	13	16	11	24	4	1
16-20 YEARS	88	20	18	38	8	11	12	14	20	22	15	19	11	24	4	1
21-25 YEARS	55	12	6	13	6	8	5	6	12	13	16	20	9	20	1	1
26-30 YEARS	37	8	7	15	3	4	4	5	6	4	9	11	6	13	4	1
31 OR MORE	25	6	5	11	1	1	3	4	6	7	6	8	3	7	1	1
NO ANSWER	9	2	2	4	3	4	1	1	1	1	2	3	0	0	0	0
TOTAL	445	100	47	101	73	98	84	101	89	99	79	100	46	101	27	10

Table 1-1

1. HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE, ON DUTY, HANDGUNS OF EACH OF THE FOLLOWING CALIBERS? (EITHER AS THEIR PRIMARY OR THEIR BACKUP WEAPON.)-- Numbers represent numbers of officers carrying handgun of specified caliber.

CALIBER

ALL DEPARTMENT TYPES	STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
.32 AUTOMATIC	159	0	3	0	2	0	6	0	9	0	136	0	3	1
.38 SPECIAL	144015	80	25451	59	1639	55	1293	68	8009	81	106540	88	149	56
9 MM	2356	1	1785	4	82	3	40	2	171	2	250	0	11	4
.357 MAGNUM	29984	17	15288	36	1194	40	498	26	1620	16	11111	9	97	36
.45 AUTOMATIC	2674	1	84	0	30	1	42	2	125	1	2365	2	2	1
.22	138	0	105	0	3	0	8	0	2	0	15	0	1	0
.25	67	0	24	0	1	0	3	0	19	0	15	0	2	1
.32 REVOLVER	32	0	0	0	1	0	0	0	5	0	26	0	0	0
.380	103	0	40	0	0	0	0	0	28	0	29	0	1	0
.41	135	0	5	0	1	0	1	0	1	0	126	0	0	0
.44	224	0	5	0	4	0	1	0	48	0	166	0	0	0
OTHER	4	0	1	0	1	0	0	0	0	0	0	0	0	0
TOTAL	179891	99	42791	99	2960	99	1896	98	10437	100	120779	99	266	99

Table 1-2

1. HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE, ON DUTY, HANDGUNS OF EACH OF THE FOLLOWING CALIBERS? (EITHER AS THEIR PRIMARY OR THEIR BACKUP WEAPON.)-- Numbers represent numbers of departments with at least one officer carrying handgun of specified caliber.

CALIBER

ALL DEPARTMENT TYPES	STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
.32 AUTOMATIC	14	3	1	2	2	3	2	2	4	5	3	7	2	7
.38 SPECIAL	418	94	41	87	69	95	84	94	77	97	46	100	23	85
9 MM	64	14	7	15	7	10	13	15	17	22	6	13	7	26
.357 MAGNUM	249	56	31	66	43	59	51	57	42	53	19	41	20	74
.45 AUTOMATIC	46	10	3	6	8	11	11	12	11	14	7	15	2	7
.22	12	3	4	9	1	1	3	3	1	1	1	2	1	4
.25	14	3	3	6	1	1	2	2	5	6	1	2	1	4
.32 REVOLVER	4	1	0	0	1	1	0	0	1	1	2	4	0	0
.380	9	2	1	2	0	0	2	2	2	3	2	4	1	4
.41	8	2	1	2	1	1	1	1	1	1	3	7	0	0
.44	10	2	1	2	2	3	1	1	3	4	3	7	0	0
OTHER	2	0	1	2	1	1	0	0	0	0	0	0	0	0
TOTAL	850	190	94	199	136	146	170	169	164	207	93	202	57	211

Table 1-3

AVERAGE NUMBER OF OFFICERS USING, ON DUTY, HANDGUNS OF SPECIFIED CALIBERS AS
PRIMARY OR BACKUP WEAPON.

CALIBER	ALL DEPARTMENT TYPES	STATE	COUNTY	DEPARTMENT TYPE			CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
				CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)			
.32 AUTOMATIC	MEAN	11.36	3.00	1.00	.00	3.00	2.25	45.33	1.50
	MINIMUM	1	3	1	0	1	1	6	1
	MAXIMUM	120	3	1	0	5	4	120	2
.38 SPECIAL	MEAN	34.53	620.76	23.75	6.85	15.39	109.21	2316.09	6.48
	MINIMUM	1	24	1	1	1	5	128	1
	MAXIMUM	32000	3875	394	84	48	592	32000	21
9 MM	MEAN	36.81	255.00	11.71	2.43	3.08	10.06	41.67	1.57
	MINIMUM	1	3	1	1	1	1	4	1
	MAXIMUM	1700	1700	73	6	18	64	101	5
.357 MAGNUM	MEAN	120.42	493.16	27.77	4.09	9.76	38.57	584.79	4.85
	MINIMUM	1	5	1	1	1	2	30	1
	MAXIMUM	3000	2500	353	37	30	155	3000	26
.45 AUTOMATIC	MEAN	59.13	28.00	3.75	6.50	3.82	11.36	337.86	1.00
	MINIMUM	1	4	1	1	1	1	2	1
	MAXIMUM	2000	50	9	20	18	36	2000	1
OTHER	MEAN	11.92	16.36	1.86	2.25	1.89	7.92	31.42	1.33
	MINIMUM	1	1	1	1	1	1	6	1
	MAXIMUM	99	48	3	4	6	45	99	2

Table 2-1

2. SELECT FROM THE LIST IN QUESTION 1 THE HANDGUN THAT IS USED, ON DUTY, BY MORE OF YOUR OFFICERS THAN ANY OTHER.

MOST USED HANDGUN: 2.A. CALIBER TYPE

CALIBER

	ALL DEPARTMENT TYPES				DEPARTMENT TYPE				TOWNSHIP			
	NO.	%	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	NO.	%	NO.	%
.38	328	74	25	53	64	76	63	71	63	80	41	89
9 MM	4	1	1	2	1	1	1	1	0	0	0	0
.357 MAGNUM	109	24	21	45	17	20	24	27	15	19	5	11
.45	4	1	0	0	2	2	1	1	0	0	0	0
TOTAL	445	100	47	100	84	99	99	100	79	100	46	100

Table 2-2

2. AVERAGE NUMBER OF OFFICERS USING AS THEIR PRIMARY ON-DUTY WEAPON HANDGUNS OF SPECIFIED CALIBERS.

CALIBER

	ALL DEPARTMENT TYPES				DEPARTMENT TYPE				TOWNSHIP			
	NO.	%	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	NO.	%	NO.	%
.38 SPECIAL	427.02		936.44	26.81	7.66	18.29	127.40	2570.76	7.44			
MEAN	1		93	1	1	5	22	255	1			
MINIMUM	3200		3875	394	64	48	592	3200	21			
MAXIMUM												
9 MM	447.00		1700.00	.00	6.00	18.00	64.00	.00	.00			
MEAN	6		1700	0	6	18	64	0	0			
MINIMUM	1700		1700	0	0	18	64	0	0			
MAXIMUM												
.357 MAGNUM	170.44		541.33	48.22	5.35	14.33	62.00	978.60	8.33			
MEAN	1		106	2	1	5	6	213	1			
MINIMUM	1950		1950	353	16	30	150	1927	20			
MAXIMUM												
.45 AUTOMATIC	11.00		.00	3.00	11.50	18.00	.00	.00	.00			
MEAN	3		0	3	3	18	0	0	0			
MINIMUM	20		0	3	23	18	0	0	0			
MAXIMUM												
OTHER	.00		.00	.00	.00	.00	.00	.00	.00			
MEAN	0		0	0	0	0	0	0	0			
MINIMUM	0		0	0	0	0	0	0	0			
MAXIMUM												

B-5

Table 2 B-1

2.B. HOW MANY (MOST USED HANDGUNS) ARE REVOLVERS?
HOW MANY (MOST USED HANDGUNS) ARE AUTOMATICS? (NUMBER OF GUNS)

GUN TYPE

	ALL DEPARTMENT TYPES	STATE	COUNTY		DEPARTMENT TYPE										TOWNSHIP	
					CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES					
			NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%		
REVOLVERS	162748	99	36918	96	2327	100	584	95	1496	98	9282	99	111923	100	213	100
	1840	1	1700	4	11	0	29	5	36	2	64	1	0	0	0	0
TOTAL	164588	100	38618	100	2338	100	613	100	1532	100	9346	100	111923	100	213	100

Table 2 B-2

2.B. HOW MANY (MOST USED HANDGUNS) ARE REVOLVERS?
HOW MANY (MOST USED HANDGUNS) ARE AUTOMATICS? (NUMBER OF DEPARTMENTS)

GUN TYPE

	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE					FIFTY LARGEST CITIES	TOWNSHIP				
		NO.	%	CITY (1-9 OFFICERS)	%	CITY (10-49 OFFICERS)	%	CITY (50 OR MORE OFFICERS)	%							
REVOLVERS	438	98	46	98	73	100	81	96	87	98	78	99	46	100	27	100
	10	2	1	2	3	4	3	4	2	2	1	1	0	0	0	0
TOTAL	448	100	47	100	76	104	84	100	89	100	79	100	46	100	27	100

Table 2 B-3

2.B. CALIBER BREAKDOWN OF ALL MOST USED GUNS - REVOLVERS (NUMBER OF GUNS)

CALIBER

CALIBER	ALL DEPARTMENT TYPES	STATE	COUNTY	DEPARTMENT TYPE												
				CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP				
				NO.	%	NO.	%	NO.	%	NO.	%	NO.	%			
.38	144093	89	25475	69	1456	63	493	84	1154	77	8343	90	107035	96	137	64
.357 MAGNUM	18652	11	11443	31	868	37	91	16	342	23	939	10	4893	4	76	36
.45	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
TOTAL	162748	100	36918	100	2327	100	584	100	1496	100	9282	100	111923	100	213	100

Table 2 B-4

2.B. CALIBER BREAKDOWN OF ALL MOST USED GUNS - REVOLVERS (NUMBER OF DEPARTMENTS)

CALIBER

CALIBER	ALL DEPARTMENT TYPES	STATE	COUNTY	DEPARTMENT TYPE										FIFTY LARGEST CITIES	TOWNSHIP	
				CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)								
				NO.	%	NO.	%	NO.	%	NO.	%					
.38 .357 MAGNUM .45	328	75	25	54	74	64	79	63	72	63	81	41	89	18	67	
	109	25	21	46	18	25	17	21	24	28	15	19	5	11	9	33
	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
TOTAL	438	100	46	100	73	100	81	100	87	100	78	100	46	100	27	100

2.B. CALIBER BREAKDOWN OF ALL MOST USED GUNS - AUTOMATICS (NUMBER OF GUNS)

CALIBER

ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.		%		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		NO.		NO.		NO.	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
.38	11	1	0	0	0	0	0	0	0	0	0	0	0	0
9 MM	1788	97	1700	100	0	0	18	50	64	100	0	0	0	0
.45	41	2	0	0	23	79	18	50	0	0	0	0	0	0
TOTAL	1840	100	1700	100	29	100	36	100	64	100	0	0	0	0

Table 2 B-6

2.B. CALIBER BREAKDOWN OF ALL MOST USED GUNS - AUTOMATICS (NUMBER OF DEPARTMENTS)

CALIBER

ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.		%		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		NO.		NO.		NO.	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
.38	3	30	0	0	0	0	0	0	0	0	0	0	0	0
9 MM	4	40	1	100	1	33	1	50	1	100	0	0	0	0
.45	3	30	0	0	2	67	1	50	0	0	0	0	0	0
TOTAL	10	100	1	100	3	100	2	100	1	100	0	0	0	0

Table 2 C-1

2.C. LIST BELOW EACH DIFFERENT MODEL OF THIS MOST USED HANDGUN NOW USED IN YOUR (NUMBER OF DEPARTMENTS) DEPARTMENT.

MANUFACTURER

	ALL DEPARTMENT TYPES	STATE	COUNTY	DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.
1	221	50	21	45	33	39	44	49	48	61	26	57	15
2	403	91	45	96	74	88	78	88	75	95	46	100	23
5	2	0	0	0	0	0	1	1	0	0	0	0	0
7	1	0	0	0	0	0	1	1	0	0	0	0	0
13	8	2	0	0	0	0	4	4	1	1	1	2	0
14	3	1	0	0	1	1	1	1	0	0	0	0	1
15	1	0	0	0	0	0	0	0	0	0	0	0	4
OTHER	1	0	0	0	0	0	1	1	0	0	0	0	0
TOTAL	640	144	66	141	108	128	130	145	124	157	73	159	39

Table 2 D-1

2.D. BARREL LENGTHS: (FOR YOUR MOST USED HANDGUN) HOW MANY HAVE BARRELS OF THE (NUMBER OF GUNS) FOLLOWING LENGTHS?

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE			COUNTY			CITY (1-9 OFFICERS)			CITY (10-49 OFFICERS)			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	15067	9	3242	8	337	14	53	9	114	7	1563	17	9732	9	26	12	9732	9	26	12	9732	9
3-5 INCHES	133364	81	24941	65	1987	81	529	86	1308	85	7239	77	97285	87	175	82	97285	87	175	82	97285	87
MORE THAN 5 INCHES	16062	10	10435	27	114	5	31	5	110	7	449	5	4911	4	12	6	4911	4	12	6	4911	4
NO ANSWER	95	0	0	0	0	0	0	0	0	0	95	1	0	0	0	0	0	0	0	0	0	0
TOTAL	164598	100	38618	100	2338	100	613	100	1532	99	9346	100	111928	100	213	100	111928	100	213	100	111928	100

Table 2 D-2

2.D. BARREL LENGTHS: (FOR YOUR MOST USED HANDGUN) HOW MANY HAVE BARRELS OF THE (NUMBER OF DEPARTMENTS) FOLLOWING LENGTHS?

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE			COUNTY			CITY (1-9 OFFICERS)			CITY (10-49 OFFICERS)			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	212	48	16	34	44	60	21	25	29	33	58	73	32	70	12	44	32	70	12	44	32	70
3-5 INCHES	412	93	41	87	60	82	60	95	85	96	76	96	46	100	24	89	46	100	24	89	46	100
MORE THAN 5 INCHES	87	20	8	17	17	23	12	14	18	20	20	25	9	20	3	11	9	20	3	11	9	20
NO ANSWER	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
TOTAL	712	161	65	138	121	165	113	134	132	149	155	195	87	190	39	144	87	190	39	144	87	190

Table 2A 2D-1

COMPARISON BETWEEN MOST USED HANDGUN CALIBER AND BARREL LENGTH (NUMBER OF GUNS)

BARREL LENGTH	TOTAL		.38		9 MM		.357		.45	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	15067	9	14651	10	0	0	410	2	0	0
3-5 INCHES	133364	81	114904	80	1789	100	16532	89	40	91
MORE THAN 5 INCHES	16062	10	14454	10	0	0	1004	9	4	9
NO ANSWER	95	0	95	0	0	0	0	0	0	0

Table 2A 2D-2

COMPARISON BETWEEN MOST USED HANDGUN CALIBER AND BARREL LENGTH (NUMBER OF DEPARTMENTS)

BARREL LENGTH	TOTAL		.38		9 MM		.357		.45	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	212	30	191	35	0	0	21	13	0	0
3-5 INCHES	412	58	299	55	4	100	106	68	3	60
MORE THAN 5 INCHES	87	12	55	10	0	0	30	19	2	40
NO ANSWER	1	0	1	0	0	0	0	0	0	0

Table 2 D-3

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .38 CALIBER (NUMBER OF GUNS)

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE	COUNTY	DEPARTMENT TYPE								TOWNSHIP				
				CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES						
				NO.	%	NO.	%	NO.	%		NO.		%			
LESS THAN 3 INCHES	14651	10	3231	13	296	20	46	10	111	10	1534	18	9408	9	23	17
3-5 INCHES	114904	80	12599	49	1075	73	418	85	976	85	6320	76	93412	87	104	76
MORE THAN 5 INCHES	14454	10	9645	38	96	7	27	5	67	6	394	5	4215	4	10	7
NO ANSWER	95	0	0	0	0	0	0	0	0	0	95	1	0	0	0	0
TOTAL	144104	100	25475	100	1467	100	493	100	1154	101	8343	100	107035	100	137	100

Table 2 D-4

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .38 CALIBER (NUMBER OF DEPARTMENTS)

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE	COUNTY		DEPARTMENT TYPE				FIFTY LARGEST CITIES	TOWNSHIP
			NO.	%	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)			
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	191	58	15	60	10	25	28	44	29	71
3-5 INCHES	299	91	20	80	62	97	60	95	41	100
MORE THAN 5 INCHES	55	17	6	24	10	16	9	14	7	17
NO ANSWER	1	0	0	0	0	0	0	0	0	0
TOTAL	546	166	41	164	88	138	97	153	77	188
									27	150

Table 2 D-5

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .357 CALIBER (NUMBER OF GUNS)

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				FIFTY LARGEST CITIES	TOWNSHIP	
		NO.	%	NO.	%	CITY (11-9 OFFICERS)	%	CITY (10-49 OFFICERS)	%		NO.	%
LESS THAN 3 INCHES	416	2		11	0	5	5	3	1	324	7	4
3-5 INCHES	16632	89		10642	93	85	93	296	87	3873	79	71
MORE THAN 5 INCHES	1604	9		790	7	1	1	43	13	696	14	2
TOTAL	18652	100		11443	100	91	99	342	101	4893	100	76

Table 2 D-6

BARREL LENGTHS WHEN MOST USED HANDGUN IS A .357 CALIBER (NUMBER OF DEPARTMENTS)

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				FIFTY LARGEST CITIES	TOWNSHIP	
		NO.	%	NO.	%	CITY (11-9 OFFICERS)	%	CITY (10-49 OFFICERS)	%		NO.	%
LESS THAN 3 INCHES	21	19		1	5	5	29	1	4	3	60	2
3-5 INCHES	106	97		20	95	10	94	23	96	5	100	9
MORE THAN 5 INCHES	30	28		2	10	1	6	9	37	2	40	1
TOTAL	157	144		23	110	22	129	33	137	10	200	12

Table 2 E-1

2-E. AMMUNITION: LIST EACH TYPE OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS (NUMBER OF DEPARTMENTS)
MOST USED HANDGUN.

BULLET TYPE

	ALL DEPARTMENT TYPES			STATE			COUNTY			DEPARTMENT TYPE				FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%		NO.	%		NO.	%		CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)		NO.	%		NO.	%	
LEAD	217	49		22	47		33	45		44	52	32	36	42	53		24	61	
JACKETED	66	15		8	17		6	8		13	15	20	22	10	13		7	15	
HOLLOWPOINT	105	24		8	17		14	19		11	13	25	28	29	37		15	33	
WAD CUTTER	28	6		6	13		4	5		3	4	5	6	4	5		6	13	
SEMI WADCUTTER	14	3		1	2		3	4		0	0	1	1	3	4		4	9	
SOFT POINT	45	10		9	19		8	11		4	5	9	10	8	10		6	13	
METAL PIERCING	8	2		2	4		0	0		1	1	3	3	2	3		0	0	
UNUSABLE INFO	73	16		3	6		17	23		10	19	16	18	12	15		2	4	
UNKNOWN	1	0		0	0		1	1		0	0	0	0	0	0		0	0	
NO ANSWER	5	1		0	0		2	3		2	2	1	1	0	0		0	0	
TOTAL	562	126		59	125		88	119		94	111	112	125	110	140		68	148	
																	31	114	

Table 2 E-2

LIST EACH BULLET WEIGHT, IN GRAINS, THAT YOUR OFFICERS USE WITH THIS MOST USED (NUMBER OF DEPARTMENTS)
HANDGUN.

BULLET WEIGHT (IN GRAINS)

	ALL DEPARTMENT TYPES			STATE			COUNTY			DEPARTMENT TYPE				FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%		NO.	%		NO.	%		CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)		NO.	%		NO.	%	
LESS THAN 91	1	0		0	0		0	0		1	1	0	0	0	0		0	0	
91-100	3	1		1	2		0	0		1	1	0	0	0	0		0	0	
101-110	75	17		7	15		8	11		6	10	18	20	22	28		10	22	
111-120	2	0		0	0		1	1		1	1	0	0	0	0		0	0	
121-130	33	7		3	6		6	8		1	1	6	7	8	10		9	20	
131-140	4	1		0	0		2	3		0	0	0	0	1	1		0	0	
141-150	55	12		8	17		7	10		10	12	13	15	8	10		1	2	
151-160	327	73		37	79		52	71		58	69	61	69	59	75		39	85	
161-170	3	1		0	0		0	0		1	1	0	0	0	0		0	0	
171-180	2	0		1	2		0	0		0	0	0	0	1	1		0	0	
181-190	3	1		0	0		0	0		1	1	2	2	0	0		0	0	
191-200	25	6		1	2		4	5		7	8	7	9	7	9		3	7	
GREATER THAN 210	6	1		0	0		1	1		2	2	1	1	0	0		2	4	
NO ANSWER/DONT KNOW	19	4		1	2		8	11		4	5	4	4	2	3		0	0	
TOTAL	558	124		59	125		89	121		95	112	109	122	108	137		63	149	
																	30	111	

B-14

Table 2 E-3

LIST EACH MANUFACTURER OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS MOST USED (NUMBER OF DEPARTMENTS)

MANUFACTURER

	ALL DEPARTMENT TYPES	STATE				COUNTY				DEPARTMENT TYPE				CITY				CITY (50 OR MORE OFFICERS)				FIFTY LARGEST CITIES				TOWNSHIP			
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
2	19	4		5	11	2	3			3	4	2	2	2	3			2	3			4	9	1	4				
5	10	2		0	0	1	1			1	1	1	3	3	4			3	4			1	2	1	4				
8	237	53		29	62	35	43			45	54	40	45	43	54			43	54			23	61	17	63				
10	47	11		3	6	10	14			7	8	7	8	11	14			11	14			7	15	2	7				
11	10	2		1	2	1	1			1	1	3	3	0	0			0	0			4	9	0	0				
12	76	17		7	15	10	14			9	11	17	19	23	29			23	29			8	17	2	7				
13	10	2		2	4	2	3			0	0	1	1	1	1			4	5			1	2	0	0				
16	152	34		19	40	21	29			25	30	33	37	28	35			28	35			17	37	9	33				
18	14	3		1	2	4	5			1	1	2	2	2	2			4	5			1	2	1	4				
19	10	2		3	6	2	3			0	0	3	3	2	3			2	3			0	0	0	0				
ANY, ALL	3	1		0	0	1	1			0	0	1	1	1	1			1	1			0	0	0	0				
MULTIPLE MANUFACTURERS	6	1		1	2	0	0			0	0	2	2	2	2			1	1			2	4	0	0				
UNKNOWN	5	1		0	0	3	4			0	0	1	1	1	1			0	0			0	0	1	4				
OTHER	6	1		0	0	0	0			1	1	0	0	1	1			1	1			4	9	0	0				
NO ANSWER	9	2		0	0	2	3			3	4	3	3	3	3			0	0			1	2	0	0				
TOTAL	614	136		71	150	94	129			90	115	118	130	123	155			123	155			78	169	34	126				

Table 3-1

3. GO BACK TO QUESTION 1 AND PICK OUT THE HANDGUN THAT IS SECOND MOST OFTEN USED BY YOUR OFFICERS.

SECOND MOST USED HANDGUN: 3.A. CALIBER TYPE

CALIBER

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO. %		NO. %		NO. %		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
.32	7	3	0	0	2	5	0	0	0	0	2	4	2	9	1	5
.38	87	34	16	53	14	32	14	33	20	38	14	29	5	23	4	21
9 MM	17	7	1	3	1	2	4	9	3	6	4	8	0	0	4	21
.357 MAGNUM	132	51	10	33	25	57	23	53	25	50	25	51	14	64	9	47
.45	5	2	0	0	2	5	0	0	1	2	2	4	0	0	0	0
.22	5	2	1	3	0	0	1	2	1	2	0	0	1	5	1	5
.25	4	2	1	3	0	0	1	2	1	2	1	2	0	0	0	0
.380	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
.44	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0
TOTAL	259	101	30	98	44	101	43	99	52	100	49	100	22	101	19	99

Table 3-2

3. AVERAGE NUMBER OF OFFICERS ASSOCIATED WITH SECOND MOST USED ON DUTY HANDGUNS,
FOR SPECIFIED CALIBERS

CALIBER

	ALL DEPARTMENT TYPES	STATE	COUNTY	DEPARTMENT TYPE			FIFTY LARGEST CITIES	TOWNSHIP
				CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)		
.32 AUTOMATIC	MEAN	.00	1.00	.00	.00	3.00	13.00	2.00
	MINIMUM	0	1	0	0	1	6	2
	MAXIMUM	0	1	0	0	5	20	2
.38 SPECIAL	MEAN	127.50	13.36	3.14	6.90	27.36	227.90	2.75
	MINIMUM	1	1	1	1	5	128	1
	MAXIMUM	400	98	10	20	51	400	6
9 MM	MEAN	30.00	2.00	2.25	3.00	5.75	.00	2.00
	MINIMUM	1	2	2	2	1	0	1
	MAXIMUM	30	2	3	4	15	0	5
.357 MAGNUM	MEAN	392.00	13.04	3.52	5.81	26.60	444.14	2.11
	MINIMUM	5	1	1	1	3	30	1
	MAXIMUM	3000	119	37	20	155	3000	5
.45 AUTOMATIC	MEAN	.00	3.00	.00	4.00	18.50	.00	.00
	MINIMUM	0	2	0	4	2	0	0
	MAXIMUM	0	4	0	4	35	0	0
OTHER	MEAN	32.33	.00	3.50	4.00	26.00	15.00	1.00
	MINIMUM	9	0	3	2	7	15	1
	MAXIMUM	48	0	4	6	45	15	1

Table 3 B-1

3.B. HOW MANY (SECOND MOST USED HANDGUNS) ARE REVOLVERS?
HOW MANY (SECOND MOST USED HANDGUNS) ARE AUTOMATICS?

(NUMBER OF GUNS)

GUN TYPE

	ALL DEPARTMENT TYPES	STATE	COUNTY	DEPARTMENT TYPE										TOWNSHIP
				CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES				
				NO.	%	NO.	%	NO.	%	NO.	%			
REVOLVERS	15410	98	5960	98	130	92	280	93	1101	94	7383	100	33	77
AUTOMATICS	258	2	127	2	6	1	21	7	67	6	15	0	10	23
TOTAL	15668	100	6087	100	523	100	307	100	1168	100	7393	100	43	100

Table 3 B-2

3.B. HOW MANY (SECOND MOST USED HANDGUNS) ARE REVOLVERS?
HOW MANY (SECOND MOST USED HANDGUNS) ARE AUTOMATICS?

(NUMBER OF DEPARTMENTS)

GUN TYPE

	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				FIFTY LARGEST CITIES	TOWNSHIP			
		NO.	%	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	NO.	%						
REVOLVERS AUTOMATICS	229	88	26	87	42	95	36	88	46	88	21	95	14	74
	31	12	4	13	3	7	5	12	6	12	1	5	5	26
	260	100	30	100	45	102	43	100	52	100	22	100	19	100

Table 3 B-3

3.B. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS - REVOLVERS (NUMBER OF GUNS)

CALIBER

CALIBER	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
		NO. %		NO. %		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		NO. %		NO. %		NO. %	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
.32	34	0		0	0	0	0	0	0	6	1	25	0	0	0
.38	3943	26		2040	34	187	36	136	48	383	35	1139	15	13	39
.357 MAGNUM	11381	74		3920	66	326	63	150	52	667	61	6218	84	19	58
.45	2	0		0	0	2	0	0	0	0	0	0	0	0	0
.44	5	0		0	0	0	0	0	0	0	0	0	0	1	3
.22	45	0		0	0	4	3	0	0	45	4	0	0	0	0
.44	45	0		0	0	0	0	0	0	45	4	0	0	0	0
TOTAL	15410	100		5960	100	517	99	286	100	1101	101	7383	99	33	100

Table 3 B-4

3.B. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS - REVOLVERS (NUMBER OF DEPARTMENTS)

CALIBER

CALIBER	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
		NO. %		NO. %		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		NO. %		NO. %		NO. %	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
.32	6	3		0	0	0	0	0	0	2	5	2	10	0	0
.38	87	38		16	62	14	37	20	43	14	33	5	24	4	29
.357 MAGNUM	132	58		10	38	25	61	25	57	25	60	14	67	9	64
.45	1	0		0	0	1	2	0	0	0	0	0	0	0	0
.44	2	1		0	0	0	0	0	0	0	0	0	0	1	7
.22	1	0		0	0	1	3	0	0	1	2	0	0	0	0
.44	1	0		0	0	0	0	0	0	1	2	0	0	0	0
TOTAL	229	100		26	100	42	100	46	100	42	100	21	101	14	100

Table 3 B-5

3.B. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS - AUTOMATICS (NUMBER OF GUNS)

- CALIBER

ALL DEPARTMENT TYPES	NO.	%	STATE	COUNTY	DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
			NO.	%	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	NO.	%			
.32	2	1	0	0	0	0	0	0	0	0	2
9 MM	81	31	30	24	9	9	23	34	0	0	8
.45	45	17	0	0	0	4	19	55	0	0	0
.22	69	27	48	39	0	6	29	0	15	100	0
.25	21	8	9	7	3	2	10	7	0	0	0
.380	40	16	40	31	0	0	0	0	0	0	0
TOTAL	258	100	127	100	12	21	101	99	15	100	10

Table 3 B-6

3.B. CALIBER BREAKDOWN OF ALL SECOND MOST USED GUNS - AUTOMATICS (NUMBER OF DEPARTMENTS)

CALIBER

ALL DEPARTMENT TYPES	NO.	%	STATE	COUNTY	DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP
			NO.	%	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	NO.	%			
.32	1	3	0	0	0	0	0	0	0	0	1
9 MM	17	55	1	25	4	3	50	4	57	0	4
.45	5	16	0	0	0	1	17	2	29	0	0
.22	3	10	1	25	0	1	17	0	0	1	0
.25	4	13	1	25	1	1	17	1	14	0	0
.380	1	3	1	25	0	0	0	0	0	0	0
TOTAL	31	100	4	100	5	6	101	7	100	1	5

Table 3 C

3.C. LIST BELOW EACH DIFFERENT MODEL OF THIS SECOND MOST USED HANDGUN NOW USED (NUMBER OF DEPARTMENTS)
IN YOUR DEPARTMENT.

MANUFACTURER

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	CITY (1-9 OFFICERS)	NO.	%	CITY (10-49 OFFICERS)	NO.	%	NO.	%	NO.	%
1	121	47	13	43	21	48	16	37	24	46	25	51	15	73	6	32
2	202	78	23	77	34	77	29	67	43	83	40	82	22	100	11	58
4	6	2	0	0	1	2	0	0	1	2	2	4	0	0	2	11
5	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0
8	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0
13	7	3	0	0	4	9	2	5	0	0	0	0	0	0	1	5
14	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0
OTHER	4	2	1	3	0	0	0	0	0	0	1	2	0	0	2	11
UNKNOWN	3	1	0	0	1	2	0	0	1	2	1	2	0	0	0	0
TOTAL	346	133	38	126	62	140	47	109	70	135	69	141	34	173	22	117

Table 3 D-1

3.D. BARREL LENGTHS: FOR YOUR SECOND MOST USED HANDGUN, HOW MANY HAVE BARRELS OF THE FOLLOWING LENGTHS? (NUMBER OF GUNS)

BARREL LENGTH

	ALL DEPARTMENT TYPES			STATE			COUNTY			DEPARTMENT TYPE			CITY			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%		NO.	%		NO.	%		NO.	%		NO.	%		NO.	%		NO.	%		NO.	%	
LESS THAN 3 INCHES	2372	15		1150	19		156	30		17	12		69	22		235	20		729	10		16	37	
3-5 INCHES	10258	65		2421	40		326	62		118	83		197	64		663	74		6308	85		25	58	
MORE THAN 5 INCHES	3009	19		2516	41		41	8		4	3		31	10		54	5		361	5		2	5	
NO ANSWER	29	0		0	0		0	0		3	2		10	3		16	1		0	0		0	0	
TOTAL	15668	99		6097	100		523	100		142	100		307	99		1168	100		7399	100		43	100	

Table 3 D-2

3.D. BARREL LENGTHS: FOR YOUR SECOND MOST USED HANDGUN, HOW MANY HAVE BARRELS OF THE FOLLOWING LENGTHS? (NUMBER OF DEPARTMENTS)

BARREL LENGTH

	ALL DEPARTMENT TYPES			STATE			COUNTY			DEPARTMENT TYPE			CITY			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%		NO.	%		NO.	%		NO.	%		NO.	%		NO.	%		NO.	%		NO.	%	
LESS THAN 3 INCHES	96	33		18	60		16	36		8	19		12	23		16	33		10	45		6	32	
3-5 INCHES	200	77		16	53		34	77		33	77		41	79		43	88		10	85		14	74	
MORE THAN 5 INCHES	51	20		2	7		11	25		3	7		12	23		12	24		9	41		2	11	
NO ANSWER	4	2		0	0		0	0		2	5		1	2		1	2		0	0		0	0	
TOTAL	341	132		36	120		61	138		46	108		66	127		72	147		34	172		22	117	

Table 3 D-3

BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .38 CALIBER (NUMBER OF GUNS)

BARREL LENGTH

BARREL LENGTH	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	2097	53		1046	51	120	64	13	29	61	45	191	50	654	57
3-5 INCHES	1759	45		894	49	66	35	32	71	48	35	156	41	462	41
MORE THAN 5 INCHES	77	2		0	0	1	1	0	0	17	12	23	9	23	2
NO ANSWER	10	0		0	0	0	0	0	0	10	7	0	0	0	0
TOTAL	3943	100		2040	100	187	100	45	100	136	99	383	100	1139	100

Table 3 D-4

BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .38 CALIBER (NUMBER OF DEPARTMENTS)

BARREL LENGTH

BARREL LENGTH	ALL DEPARTMENT TYPES	STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	55	63		11	69	10	71	6	43	10	50	10	71	3	75
3-5 INCHES	56	64		8	50	11	79	11	79	11	55	11	79	1	25
MORE THAN 5 INCHES	13	15		0	0	1	7	0	0	6	30	4	29	2	40
NO ANSWER	1	1		0	0	0	0	0	0	1	5	0	0	0	0
TOTAL	125	143		19	119	22	157	17	122	28	140	25	179	10	200

Table 3 D-5

BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .357 CALIBER (NUMBER OF GUNS)

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE			COUNTY			CITY (11-9 OFFICERS)			CITY (10-49 OFFICERS)			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	171	2	47	1	36	11	1	1	1	0	0	0	36	5	59	1	59	1	1	5	1	5
3-5 INCHES	8262	73	1357	35	253	78	73	90	136	91	14	9	597	90	5830	94	16	84	16	84	16	84
MORE THAN 5 INCHES	2929	26	2516	64	37	11	4	5	14	9	16	2	16	3	338	5	2	11	2	11	2	11
NO ANSWER	19	0	0	0	0	0	3	4	0	0	0	0	16	2	0	0	0	0	0	0	0	0
TOTAL	11381	101	3920	100	326	100	81	100	150	100	667	100	6218	100	6218	100	19	100	19	100	19	100

Table 3 D-6

BARREL LENGTHS WHEN SECOND MOST USED HANDGUN IS A .357 CALIBER (NUMBER OF DEPARTMENTS)

BARREL LENGTH

	ALL DEPARTMENT TYPES	STATE			COUNTY			CITY (11-9 OFFICERS)			CITY (10-49 OFFICERS)			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
LESS THAN 3 INCHES	20	15	5	50	6	24	1	4	0	0	0	0	4	16	3	21	3	21	1	11	1	11
3-5 INCHES	116	88	6	60	20	80	17	74	20	100	24	96	24	96	14	100	14	100	9	100	9	100
MORE THAN 5 INCHES	36	27	2	20	8	32	3	13	6	23	8	32	8	32	7	50	7	50	2	22	2	22
NO ANSWER	3	2	0	0	0	0	2	9	0	0	0	0	1	4	0	0	0	0	0	0	0	0
TOTAL	175	132	13	130	34	136	23	100	32	123	37	148	24	171	24	171	12	133	12	133	12	133

Table 3 E-1

3.E. AMMUNITION: LIST EACH TYPE OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS (NUMBER OF DEPARTMENTS)
SECOND MOST USED HANDGUN

BULLET TYPE

ALL DEPARTMENT TYPES	STATE			COUNTY			CITY (1-9 OFFICERS)			CITY (10-49 OFFICERS)			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	NO.	%	NO.	%	NO.	%
LEAD	112	43	14	47	17	39	16	42	18	35	21	43	16	73	8	42					
JACKETED	39	15	5	17	4	9	4	9	12	23	10	20	2	9	2	11					
HOLLOWPOINT	69	27	6	20	9	20	12	28	19	37	15	31	6	27	2	11					
WAD CUTTER	8	3	2	7	2	5	0	0	0	0	1	2	1	5	0	0					
SEMI WADCUTTER	6	2	1	3	2	5	0	0	1	2	5	10	0	0	1	5					
SOFT POINT	28	11	5	17	9	18	2	5	5	10	5	10	3	14	0	0					
METAL PIERCING	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0					
FRANGIBLE	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0					
UNUSABLE INFO	36	14	4	13	7	16	7	16	6	12	6	12	0	0	6	32					
ANY, ALL	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0					
UNKNOWN	2	1	1	3	0	0	0	0	1	2	1	2	0	0	0	0					
NO ANSWER	6	2	0	0	2	5	1	2	1	2	2	4	0	0	0	0					
TOTAL	309	118	38	127	51	117	45	104	66	129	62	126	28	128	19	101					

Table 3 E-2

LIST EACH BULLET WEIGHT, IN GRAINS, THAT YOUR OFFICERS USE WITH THIS SECOND MOST (NUMBER OF DEPARTMENTS)
USED HANDGUN

BULLET WEIGHT (IN GRAINS)

ALL DEPARTMENT TYPES	STATE			COUNTY			CITY (1-9 OFFICERS)			CITY (10-49 OFFICERS)			CITY (50 OR MORE OFFICERS)			FIFTY LARGEST CITIES			TOWNSHIP		
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	NO.	%	NO.	%	NO.	%
LESS THAN 91	8	3	1	3	0	0	2	5	3	6	2	4	0	0	0	0					
91-100	7	3	1	3	0	0	0	0	1	2	10	20	2	9	1	5					
101-110	43	17	6	20	4	9	4	9	13	25	10	20	4	18	2	11					
111-120	4	2	1	3	1	2	0	0	1	2	1	2	0	0	0	0					
121-130	23	9	2	7	5	11	1	2	4	8	5	10	4	18	2	11					
131-140	3	1	1	3	1	2	0	0	0	0	0	0	1	5	0	0					
141-150	25	10	5	17	5	11	1	2	8	15	4	8	0	0	2	11					
151-160	148	57	20	67	25	57	24	56	27	52	27	55	15	68	10	53					
171-180	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0					
181-190	2	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0					
191-200	12	5	0	0	2	5	0	0	2	4	3	6	0	0	0	0					
GREATER THAN 210	5	2	0	0	1	2	1	2	0	0	2	4	1	5	0	0					
NO ANSWER/DONT KNOW	19	7	2	7	5	11	5	12	3	6	3	6	0	0	1	5					
TOTAL	300	117	39	130	49	110	45	100	54	124	59	119	27	123	19	101					

Table 3 E-3

LIST EACH MANUFACTURER OF AMMUNITION THAT YOUR OFFICERS USE WITH THIS SECOND
(NUMBER OF DEPARTMENTS)

MANUFACTURER

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		CITY (10-49 OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
2	6	2	1	3	1	2	1	2	2	4	0	0	0	0	1	5	0	0
3	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0
5	5	2	0	0	0	0	0	0	2	4	1	2	1	5	1	5	1	5
8	126	49	18	60	21	48	20	47	19	37	25	51	13	59	10	53	10	53
10	18	7	0	0	5	11	2	5	5	10	5	10	0	0	0	0	0	0
11	6	2	1	3	1	2	1	2	2	4	0	0	1	5	1	5	0	0
12	51	20	6	20	6	14	7	16	13	25	12	24	5	23	2	11	0	0
13	3	1	0	0	2	5	0	0	0	0	1	2	0	0	0	0	0	0
16	40	31	13	43	9	18	12	28	17	33	17	35	9	41	4	21	4	21
18	8	3	2	7	3	7	0	0	0	0	3	6	0	0	0	0	0	0
19	6	2	2	7	3	7	1	2	0	0	0	0	0	0	0	0	0	0
ANY, ALL	2	1	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	0
MULTIPLE MANUFACTURERS	4	2	0	0	0	0	0	0	2	4	0	0	2	9	0	0	0	0
UNKNOWN	5	2	1	3	0	0	0	0	2	4	1	2	0	0	1	5	1	5
OTHER	3	1	0	0	0	0	0	0	1	2	1	2	1	5	0	0	0	0
NO ANSWER	6	2	0	0	1	2	1	2	1	2	2	4	1	5	1	5	0	0
TOTAL	330	127	44	146	53	120	46	106	66	129	68	138	34	157	19	100		

Table 2A, 3A
COMPARISON BETWEEN MOST USED HANDGUN AND SECOND MOST USED HANDGUN BY CALIBER. (NUMBER OF DEPARTMENTS)

CALIBER

WHEN MOST USED IN:	SECOND MOST USED IS:	ALL DEPARTMENT TYPES	DEPARTMENT TYPE													
			STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
			NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
38	32 AUTO. NONE 9 MM	7 2 163 50 13 4	0 0 11 44 1 4	2 4 25 46 1 2	57 58 32 51 3 5	0 0 0 0 0 0	2 3 29 46 4 6	24 59 2 11 2 11	5 28 0 0 0 0	1 6 0 0 0 0	1 6 0 0 0 0	1 6 0 0 0 0	1 6 0 0 0 0	1 6 0 0 0 0	1 6 0 0 0 0	
	357 MAG. 45 AUTO. OTHER	132 40 2 1 11 3	10 40 0 0 3 12	25 46 1 2 0 0	25 36 0 0 2 3	26 41 0 0 2 3	25 40 1 2 2 3	14 34 0 0 1 2	9 50 0 0 1 2	0 0 0 0 1 2	0 0 0 0 1 2	0 0 0 0 1 2	0 0 0 0 1 2	0 0 0 0 1 2	0 0 0 0 1 2	
TOTAL		328 100	25 100	54 100	63 100	63 100	63 100	41 100	18 101	18 101	18 101	18 101	18 101	18 101	18 101	
9 MM	38 NONE	1 25 3 75	0 0 1 100	0 0 0 0	0 0 1 100	0 0 1 100	1 100 1 100	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
TOTAL		4 100	1 100	0 0	1 100	1 100	1 100	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
357 MAG.	38 9 MM NONE	84 77 4 4 18 17	16 76 0 0 5 24	13 72 0 0 4 22	13 76 2 12 2 12	20 83 0 0 3 12	13 87 0 0 1 7	5 100 0 0 0 0	4 44 2 22 3 33	4 44 2 22 3 33	4 44 2 22 3 33	4 44 2 22 3 33	4 44 2 22 3 33	4 44 2 22 3 33	4 44 2 22 3 33	
	45 AUTO.	3 3	0 0	1 6	0 0	1 4	1 7	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
TOTAL		109 101	21 100	18 100	17 100	24 99	15 101	5 100	9 99	9 99	9 99	9 99	9 99	9 99	9 99	
45 AUTO.	38 NONE	2 50 2 50	0 0 0 0	1 100 0 0	1 50 1 50	0 0 1 100	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
TOTAL		4 100	0 0	1 100	2 100	1 100	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	

Table 4-1

4. HOW ABOUT OFF DUTY: ABOUT HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE (NUMBER OF OFFICERS)
HANDGUNS OF EACH OF THE FOLLOWING CALIBERS WHEN THEY ARE OFF DUTY?

CALIBER

CALIBER	ALL DEPARTMENT TYPES	DEPARTMENT TYPE										TOWNSHIP
		NO.	%	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	NO.	%	
.22 LR	870	1	275	2	91	2	37	3	68	1	387	4
.25 AUTOMATIC	1041	1	133	1	65	11	30	2	167	2	614	21
.32 AUTOMATIC	739	1	75	0	66	15	36	3	176	3	361	10
.38 SPECIAL	94942	86	12492	74	2017	297	938	75	5615	81	73455	127
9 MM LUGER	4435	4	1854	11	218	13	70	6	232	3	2040	8
.357 MAGNUM	6188	6	1956	12	109	20	59	5	277	4	3763	4
.45 AUTOMATIC	1682	2	35	0	92	4	50	4	148	2	1351	2
.32 REVOLVER	17	0	0	0	0	1	1	0	7	0	8	0
.380	414	0	40	0	55	3	33	3	156	2	124	3
.41	6	0	0	0	0	0	0	0	5	0	0	0
.44	34	0	30	0	3	0	0	0	1	0	0	0
.45 REVOLVER	165	0	0	0	25	0	0	0	50	1	90	0
OTHER	1	0	0	0	0	1	0	0	0	0	0	0
TOTAL	110534	101	16890	100	2741	373	1254	101	6898	99	82199	179

Table 4-2

4. HOW ABOUT OFF DUTY: ABOUT HOW MANY OF THE OFFICERS IN YOUR DEPARTMENT USE (NUMBER OF DEPARTMENTS)
HANDGUNS OF EACH OF THE FOLLOWING CALIBERS WHEN THEY ARE OFF DUTY?

CALIBER

CALIBER	ALL DEPARTMENT TYPES	DEPARTMENT TYPE										TOWNSHIP
		NO.	%	STATE	COUNTY	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	NO.	%	
.22 LR	53	12	4	9	7	5	13	15	9	11	12	3
.25 AUTOMATIC	81	18	4	9	10	6	15	17	21	27	13	10
.32 AUTOMATIC	76	17	1	2	9	10	20	22	17	22	30	5
.38 SPECIAL	332	75	19	40	60	57	75	84	64	81	36	21
9 MM LUGER	103	23	10	21	11	7	23	26	32	41	17	3
.357 MAGNUM	101	23	9	19	16	9	18	20	29	37	17	3
.45 AUTOMATIC	74	17	3	6	13	4	17	19	20	25	15	2
.32 REVOLVER	5	1	0	0	0	1	1	1	2	3	1	0
.380	35	8	1	2	3	3	10	11	10	13	6	2
.41	2	0	0	0	0	0	0	0	1	1	1	0
.44	3	1	1	2	1	0	0	0	0	0	0	0
.45 REVOLVER	3	1	0	0	1	0	0	0	1	1	1	0
OTHER	1	0	0	0	0	1	0	0	0	0	0	0
NONE/NO ANSWER	100	22	24	51	11	22	13	15	14	18	10	6
TOTAL	969	214	76	161	142	152	205	230	221	281	143	55

Table 2A/4-1

COMPARISON BETWEEN MOST USED HANDGUN AND OFF-DUTY HANDGUNS, BY CALIBER. (NUMBER OF OFFICERS)

CALIBER

WHEN ON DUTY IS:	OFF DUTY IS:	ALL DEPARTMENT TYPES	STATE	COUNTY		CITY				CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)	FIFTY LARGEST CITIES	TOWNSHIP			
				NO.	%	CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)									
						NO.	%	NO.	%	NO.	%						
38	22 LR	9934	4	2190	10	711	11	13	2	183	9	956	6	5851	3	30	8
	25 AUTO	10546	5	1403	6	745	12	33	6	187	9	1693	10	6384	4	101	28
	32 AUTO	10770	5	341	2	648	10	79	15	182	9	1501	9	7979	4	40	11
	38	109375	48	11503	51	1365	22	296	56	887	43	5940	37	89259	49	125	34
	9 MM	27605	12	2041	9	623	10	24	5	220	11	2381	15	22295	12	21	6
	357 MAG	31120	14	2041	13	774	12	26	5	193	10	1755	11	25410	14	16	4
	45 AUTO	21623	9	6	0	708	13	0	1	155	7	770	5	19890	11	4	1
	OTHER	7821	3	2190	10	615	10	52	10	69	3	1264	8	3602	2	29	8
TOTAL		228794	100	22609	101	6279	100	529	100	2031	101	16260	101	180679	99	366	100
9 MM	38	64	3	0	0	0	0	0	0	0	0	64	20	0	0	0	0
	9 MM	1788	87	1700	100	0	0	0	100	18	100	64	20	0	0	0	0
	357 MAG	64	3	0	0	0	0	0	0	0	0	64	20	0	0	0	0
	45 AUTO	64	3	0	0	0	0	0	0	0	0	64	20	0	0	0	0
	OTHER	64	3	0	0	0	0	0	0	0	0	64	20	0	0	0	0
TOTAL		2044	99	1700	100	0	0	0	100	18	100	320	100	0	0	0	0
357 MAG	22 LR	3993	8	869	5	353	9	5	2	65	5	90	3	2611	11	0	0
	25 AUTO	4054	8	500	3	527	14	8	4	94	8	201	7	2611	11	13	12
	32 AUTO	3529	7	0	0	532	14	8	4	161	14	206	7	2611	11	11	10
	38	12205	24	5965	35	800	21	60	37	332	28	840	28	4232	17	46	41
	9 MM	6902	14	3303	19	396	10	26	12	179	15	452	15	2611	11	25	22
	357 MAG	9643	19	4259	25	487	13	50	23	93	8	560	18	4232	17	2	2
	45 AUTO	7554	15	2286	13	397	10	30	14	133	11	460	15	4232	17	16	14
	OTHER	2332	5	0	0	353	9	0	4	130	11	220	7	1621	7	0	0
TOTAL		50432	100	17282	100	3845	100	215	100	1187	100	3029	100	24761	102	113	101
45 AUTO	22 LR	18	13	0	0	0	0	0	0	18	17	0	0	0	0	0	0
	25 AUTO	3	2	0	0	0	0	3	10	0	0	0	0	0	0	0	0
	32 AUTO	21	15	0	0	0	0	3	10	18	17	0	0	0	0	0	0
	38	41	30	0	0	0	0	23	79	18	17	0	0	0	0	0	0
	357 MAG	18	13	0	0	0	0	0	0	18	17	0	0	0	0	0	0
	45 AUTO	18	13	0	0	0	0	0	0	18	17	0	0	0	0	0	0
	OTHER	18	13	0	0	0	0	0	0	18	17	0	0	0	0	0	0
TOTAL		137	99	0	0	0	0	29	99	108	102	0	0	0	0	0	0

COMPARISON BETWEEN MOST USED HANDGUN AND OFF-DUTY HANDGUNS, BY CALIBER* (NUMBER OF DEPARTMENTS)

CALIBER

WHEN ON DUTY IS:	OFF DUTY IS:	ALL DEPARTMENT TYPES	STATE		COUNTY		CITY (1-9 OFFICERS)				CITY (10-49 OFFICERS)				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
			NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%		
			NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%		
38		22 LR 25 AUTO 32 AUTO 38 9 MM 357 MAG 45 AUTO OTHER NONE OR BLANK	40 60 51 245 66 61 44 33 78	6 9 8 36 10 9 6 5 12	5 8 3 24 11 5 0 0 15	6 7 6 46 8 12 9 4 7	6 7 6 44 8 11 9 9 4	3 5 7 42 4 3 1 3 19	3 6 8 48 5 3 1 3 22	9 7 6 41 10 9 7 3 12	9 7 6 38 14 11 9 8 10	18 11 14 50 23 18 13 11 13	9 8 9 30 14 11 11 8 8	5 11 8 30 17 11 7 8	9 10 11 32 14 12 13 11 9	3 8 4 15 38 27 12 12 11 9 8	3 8 21 10 15 3 1 3 2 5 8			
TOTAL			678	101	38	100	105	102	87	99	124	99	168	102	117	100	39	101		
9 MM		38 9 MM 357 MAG 45 AUTO OTHER	1 4 1 1 1	12 50 12 12 12	0 100 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 100 0 0 0	0 0 0 0 0	0 100 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0		
TOTAL			8	98	1	100	0	0	1	100	1	100	5	100	0	0	0	0		
357 MAG		22 LR 25 AUTO 32 AUTO 38 9 MM 357 MAG 45 AUTO OTHER NONE OR BLANK	12 20 23 43 33 38 28 14 21	4 7 8 31 12 14 10 5 8	2 1 0 0 5 7 3 0 9	5 3 0 27 14 19 8 24	1 3 3 39 3 4 11 3 3	3 8 8 39 8 11 11 3 8	2 2 2 13 2 6 3 2 3	6 6 6 37 6 17 9 6 9	3 4 6 11 15 23 10 6 7 1	4 8 6 31 14 8 21 9 1	1 2 3 27 13 10 21 3 1	2 6 6 31 17 21 12 6 2	3 12 12 12 15 15 15 14 4	0 0 2 6 37 4 6 1 0 3	0 12 6 1 1 1 4 19			
TOTAL			272	99	37	100	36	99	35	102	74	99	48	99	26	101	16	98		
45 AUTO		22 LR 25 AUTO 32 AUTO 38 357 MAG 45 AUTO OTHER NONE OR BLANK	1 1 2 3 1 1 1 1	9 9 18 27 9 9 9 9	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 1 2 0 0 0 0	0 25 50 0 0 0 0 0	1 17 17 17 17 17 17 17	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0			
TOTAL			11	99	0	0	1	100	4	100	6	102	0	0	0	0	0	0		

Table 5-1

5. WHEN YOU THINK OF ALL THE HANDGUNS THAT HAVE BEEN USED BY YOUR OFFICERS
IN THE LAST 5 YEARS, WHICH OF THESE GUNS HAVE HAD, OR HAVE CAUSED PROBLEMS?

RESPONSE

	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
CITED PROBLEM	203	46	34	72	21	29	20	24	42	47	42	53	33	72	11	41
NO PROBLEM	163	37	8	17	33	45	49	58	26	29	25	32	9	20	13	48
NO ANSWER	79	18	5	11	19	26	15	18	21	24	12	15	4	9	3	11
TOTAL	445	101	47	100	73	100	84	100	89	100	79	100	46	101	27	100

Table 5-2

5. WHEN YOU THINK OF ALL THE HANDGUNS THAT HAVE BEEN USED BY YOUR OFFICERS IN THE LAST 5 YEARS; WHICH OF THESE GUNS HAVE HAD, OR HAVE CAUSED PROBLEMS?

PROBLEM

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE				CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	CITY (1-9 OFFICERS)	NO.	%	CITY (10-49 OFFICERS)	NO.	%	NO.	%	NO.	%
EJECTOR ROD PROBS.	10	5	2	6	2	10	0	0	0	0	1	2	5	15	0	0
ABUSE BY PERSONNEL	20	10	1	3	2	14	0	0	0	2	4	10	10	30	0	0
ACCIDENTAL DISCHARGE	20	10	1	3	3	14	0	0	0	6	5	12	4	12	1	9
ACCURACY POOR	4	2	0	0	0	0	0	0	0	1	1	2	0	0	2	18
AGE; WEAR & TEAR	22	11	5	14	1	5	1	5	12	5	7	17	3	9	1	9
PROBS. CAUSED BY AMMO.	16	8	1	3	2	10	0	0	0	3	7	24	0	0	0	0
BARREL PROBS.	11	5	2	6	1	5	1	5	7	0	6	14	0	0	1	9
CYLINDER PROBS.	71	35	13	39	8	38	7	35	17	40	12	28	10	30	4	36
DEFECTIVE MFG; RELIABILITY	15	7	2	6	1	5	1	5	1	2	5	12	4	12	1	9
DOUBLE/SINGLE ACTION PROBS.	18	9	2	6	1	5	0	0	2	5	11	26	1	3	1	9
EXTRACTOR ROD PROBS.	6	3	2	6	1	5	0	0	0	0	1	2	2	6	0	0
FEEDING PROBS.	9	4	2	6	2	10	1	5	1	2	1	2	0	0	2	18
FINISH (BLUING) PROBS.	17	8	5	15	0	0	2	10	1	2	0	0	9	27	0	0
GRIP PROBS.	2	1	1	3	0	0	0	0	0	0	1	2	0	0	0	0
HEAD SPACE PROBS.	15	7	13	39	1	5	0	0	0	0	0	0	1	3	0	0
HAMMER/FIRING PIN PROBS.	42	21	4	12	7	33	4	20	7	16	12	28	8	24	0	0
JAMMING	16	8	1	3	3	14	1	5	3	7	6	14	2	6	0	0
LEAD SHAVING	16	8	5	15	2	10	3	15	5	12	1	2	0	0	0	0
MISFIRES	31	15	3	9	6	29	2	10	5	12	7	17	5	15	2	18
SAFETY PROBS.	4	2	1	3	0	0	0	0	2	5	0	0	0	0	1	9
SIGHT PROBS.	10	5	4	12	1	5	1	5	0	0	3	7	1	3	0	0
STOPPING POWER INSUFFICIENT	8	4	1	3	0	0	0	0	2	5	2	5	3	9	0	0
TRIGGER PROBS.	23	11	8	24	5	24	2	10	3	7	2	5	3	9	0	0
OTHER	32	16	5	15	2	10	2	10	6	14	6	14	9	27	3	27
MAIN SPRING PROBS.	18	9	6	18	0	0	0	0	1	2	5	12	5	15	0	0
TIMING OFF	16	8	6	18	0	0	2	10	0	0	2	5	6	18	0	0
SEAR PROBS.	8	4	0	0	1	5	3	15	3	7	0	0	1	3	0	0
MULTIPLE PROBS.	26		7		1		1		1		8		8		0	
TOTAL	507	236	103	288	54	256	34	165	77	178	119	264	101	276	19	171

Table 6-1

6. HOW ABOUT HANDGUN AMMUNITION: HAVE YOUR OFFICERS FOUND ANY PROBLEMS WITH ANY HANDGUN AMMUNITION THAT THEY HAVE USED IN THE LAST 5 YEARS?

RESPONSE

	DEPARTMENT TYPE															
	ALL DEPARTMENT TYPES		STATE		COUNTY		CITY (1-9 OFFICERS)		CITY (10-49 OFFICERS)		CITY (50 OR MORE OFFICERS)		FIFTY LARGEST CITIES		TOWNSHIP	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
CITED PROBLEM	117	26	21	45	13	18	7	8	14	16	34	43	28	61	0	0
NO PROBLEM	215	48	20	43	38	52	58	69	45	51	27	34	12	26	15	56
NO ANSWER	113	25	6	13	22	30	19	23	30	34	18	23	6	13	12	44
TOTAL	445	99	47	101	73	100	84	100	89	101	79	100	46	100	27	100

Table 6-2

6. HOW ABOUT HANDGUN AMMUNITION: HAVE YOUR OFFICERS FOUND ANY PROBLEMS WITH ANY HANDGUN AMMUNITION THAT THEY HAVE USED IN THE LAST 5 YEARS?

PROBLEM

	ALL DEPARTMENT TYPES		STATE		COUNTY		DEPARTMENT TYPE				FIFTY LARGEST CITIES		TOWNSHIP			
	NO.	%	NO.	%	NO.	%	CITY (1-9 OFFICERS)	CITY (10-49 OFFICERS)	CITY (50 OR MORE OFFICERS)	NO.	%	NO.	%			
POWDER, MISC PROBS.	4	3	0	0	1	8	0	0	0	0	2	6	1	4	0	0
ACCURACY POOR	6	5	2	10	0	0	0	0	0	0	1	3	3	11	0	0
CASE CARTRIDGE PROBS.	25	21	5	24	2	15	1	14	3	21	8	24	6	21	0	0
GUN FAILURE	17	15	1	5	2	15	0	0	3	21	5	15	6	21	0	0
LEADING, FOULING	6	5	1	5	3	23	0	0	0	0	0	0	2	7	0	0
MISFIRES	30	26	5	24	6	46	2	29	3	21	9	26	5	18	0	0
PRIMER PROBS.	29	25	4	19	6	46	0	0	1	7	11	32	7	25	0	0
POWER, PENETRATION LOW	35	30	6	29	0	0	5	71	1	7	5	15	18	64	0	0
POWDER, WRONG AMT	21	18	3	14	3	23	1	14	4	29	5	15	5	18	0	0
RELOAD PROBLEMS	8	7	2	10	2	15	1	14	2	14	1	3	0	0	0	0
RICOCHET	8	7	1	5	0	0	1	14	1	7	0	0	4	14	0	0
SMOKING EXCESSIVE	3	3	1	5	1	8	0	0	1	7	0	0	0	0	0	0
VARIABILITY OF ENERGY RATES	4	3	0	0	3	23	0	0	1	7	0	0	0	0	0	0
PENETRATION TOO GREAT	11	10	3	14	0	0	0	0	2	14	3	9	2	7	0	0
OTHER	14	12	5	24	1	8	0	0	1	7	3	9	3	11	0	0
KNOCKDOWN POWER LOW	32	27	5	24	0	0	3	43	3	21	6	18	14	50	0	0
MULTIPLE PROBS.	5		0	0	0	0	0	0	0	0	1	3	4		0	0
TOTAL	263	217	44	212	30	230	14	199	20	183	60	174	71	253	0	0

Table 6-3

COMPARISON BETWEEN CALIBER OF AMMUNITION AND PROBLEMS OF AMMUNITION CITED (NUMBER OF DEPARTMENTS)

PROBLEMS

	TOTAL	.39	.357	9 MM	.45	.22	.25	.41	ANY, ALL	NO ANSWER
	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.
POWDER, MISC PROBS.	3	1	0	0	0	0	0	0	0	0
ACCURACY POOR	6	2	1	0	0	0	0	0	1	0
CASE CARTRIDGE PROBS.	24	3	3	0	0	0	0	1	9	0
GUN FAILURE	17	10	3	1	2	1	0	1	18	0
LEADING, FOULING	6	7	2	1	1	0	0	0	0	0
MISFIRES	30	13	6	0	1	0	0	0	0	0
PRIMER PROBS.	27	6	0	0	0	0	0	0	0	0
POWDER, PENETRATION LOW	37	20	11	0	0	0	1	0	3	1
POWDER, WRONG AMT	14	10	6	0	0	0	100	0	27	100
RELOAD PROBLEMS	20	34	0	0	0	0	0	0	2	0
RICOCHET	8	14	3	0	1	0	0	0	18	0
SMOKING EXCESSIVE	6	8	3	0	0	0	0	0	1	0
VARIABILITY OF ENERGY RATES	3	2	0	0	0	0	0	0	9	0
PENETRATION TOO GREAT	4	2	0	0	0	0	0	0	0	0
OTHER	10	1	2	0	0	0	0	0	0	0
KNOCKDOWN POWER LOW	12	9	1	0	0	0	0	0	0	0
MULTIPLE PROBS.	30	5	3	2	2	0	0	0	0	0
	5	27	3	0	0	0	0	0	0	0
	2	5	0	0	0	0	0	0	0	0

Table 6-4

COMPARISON OF AMMUNITION PROBLEMS AND AMMUNITION MANUFACTURERS CITED (NUMBER OF DEPARTMENTS)

PROBLEMS	TOTAL NO.	1 NO.	2 NO.	3 NO.	4 NO.	5 NO.	6 NO.	7 NO.	8 NO.	9 NO.
POWDER, MISC PROBS.	3	1	0	0	0	0	0	0	0	0
ACCURACY POOR	6	2	0	0	0	0	0	0	1	0
CASE CARTRIDGE PROBS.	24	10	0	0	0	1	0	0	2	0
GUN FAILURE	17	7	0	0	0	1	0	6	12	0
LEADING, FOULING	6	2	0	0	0	0	0	1	0	0
MISFIRES	30	12	0	0	0	3	0	0	1	0
PRIMER PROBS.	27	11	0	0	0	3	0	0	3	0
POWDER, PENETRATION LOW	34	14	0	0	0	3	0	1	0	0
POWDER, WRONG AMT	20	8	0	0	0	0	2	16	2	0
RELOAD PROBLEMS	8	3	0	0	0	0	0	0	1	0
RICOCHET	6	2	0	0	0	0	0	0	0	0
SMOKING EXCESSIVE	3	1	0	0	0	0	0	1	2	0
VARIABILITY OF ENERGY RATES	4	2	0	0	0	0	0	0	0	0
PENETRATION-TOO GREAT	10	4	0	0	0	0	1	3	1	0
OTHER	12	5	0	0	0	0	0	1	6	0
KNOCKDOWN POWER LOW	30	12	0	0	0	0	2	4	12	0
MULTIPLE PROBS.	5	2	0	0	0	0	0	1	0	0

Table 6-5

COMPARISON OF AMMUNITION PROBLEMS AND AMMUNITION MANUFACTURERS CITED (CONT.)

PROBLEMS	10 NO.	11 NO.	12 NO.	13 NO.	14 NO.	15 NO.	16 NO.	17 NO.	18 NO.	19 NO.
POWDER, MISC PROBS.	0	0	0	0	0	0	1	0	1	0
ACCURACY POOR	0	0	4	0	0	0	0	0	5	0
CASE CARTRIDGE PROBS.	0	0	10	0	0	0	0	0	0	0
GUN FAILURE	0	0	12	0	0	0	0	0	0	3
LEADING, FOULING	0	0	0	0	0	1	0	1	10	0
MISFIRES	1	0	7	0	2	0	0	1	0	0
PRIMER PROBS.	1	50	4	1	15	0	0	1	20	5
POWDER, PENETRATION LOW	0	0	4	6	2	6	12	1	4	6
POWDER, WRONG AMT	0	0	9	6	3	33	25	1	20	24
RELOAD PROBLEMS	0	0	0	0	0	0	0	0	1	5
RICOCHET	0	0	0	0	0	0	0	0	4	16
SMOKING EXCESSIVE	0	0	0	0	0	0	0	0	0	0
VARIABILITY OF ENERGY RATES	0	0	4	0	0	0	0	0	0	0
PENETRATION TOO GREAT	0	0	2	0	1	2	0	0	0	0
OTHER	0	0	1	2	1	0	2	1	2	1
KNOCKDOWN POWER LOW	0	0	5	8	3	4	2	0	10	4
MULTIPLE PROBS.	0	0	0	0	0	1	0	0	5	1

U.S. DEPT. OF COMM. BIBLIOGRAPHIC DATA SHEET		1. PUBLICATION OR REPORT NO. NBSIR 73-214	2. Gov't Accession No.	3. Recipient's Accession No.
4. TITLE AND SUBTITLE LEAA POLICE EQUIPMENT SURVEY OF 1972 Volume V: Handguns and Handgun Ammunition			5. Publication Date	
			6. Performing Organization Code	
7. AUTHOR(S) S. Bergsman, E. Bunten, P. Klaus			8. Performing Organ. Report No. NBSIR 73-214	
9. PERFORMING ORGANIZATION NAME AND ADDRESS NATIONAL BUREAU OF STANDARDS DEPARTMENT OF COMMERCE WASHINGTON, D.C. 20234			10. Project/Task/Work Unit No. 4314517	
			11. Contract/Grant No. LEAA-J-IAA-009-2	
12. Sponsoring Organization Name and Complete Address (Street, City, State, ZIP) National Institute of Law Enforcement and Criminal Justice Law Enforcement Assistance Administration Department of Justice Washington, D.C. 20530			13. Type of Report & Period Covered Final: 7/71-8/73	
			14. Sponsoring Agency Code	
15. SUPPLEMENTARY NOTES				
16. ABSTRACT (A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.) <p>The report outlines the methodology of and summarizes a portion of the data from the LEAA Police Equipment Survey of 1972. One of a series of seven reports resulting from this nationwide mail survey of a stratified random sample of police departments, the present report summarizes the answers of 445 police departments concerning their officers' use of handguns and handgun ammunition: on-duty and off-duty use, types and calibers in use, and problems encountered. The data are presented by all responding departments and by seven department types.</p>				
17. KEY WORDS (six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons) Ammunition; Handguns; Police; Police Equipment; Standards				
18. AVAILABILITY <input checked="" type="checkbox"/> Unlimited <input type="checkbox"/> For Official Distribution. Do Not Release to NTIS <input type="checkbox"/> Order From Sup. of Doc., U.S. Government Printing Office Washington, D.C. 20402, SD Cat. No. C13 <input type="checkbox"/> Order From National Technical Information Service (NTIS) Springfield, Virginia 22151		19. SECURITY CLASS (THIS REPORT) UNCLASSIFIED 20. SECURITY CLASS (THIS PAGE) UNCLASSIFIED		21. NO. OF PAGES 106 22. Price

